Sunday, September 15th

Lorca Auditorium

19:00 - 21:00	Opening ceremony
19:00 - 19:30	Welcome by 20 th ICN and IUNS Presidents and Spanish Authorities
19.30 – 20.15	Opening Lecture Chair: Angel Gil, University of Granada, Granada, Spain
	The New Sustainable Development Goals and Nutrition Maria Neira, Director Public Health and Environment, World Health

Organization (WHO)

20.15 - 21.00 Performance

Monday, September 16th

Andalucía Rooms

08.00 - 10.00	Parallel Symposium

NPS1-1 Early life nutrition intervention: Effects on long term health and function (Early Nutrition Project)

Chairs: Bert Koletzko, University of Munich, Munich, Germany Keith P. West, Johns Hopkins University, Baltimore, USA

Early nutrition programming of adult health - opportunities for prevention of obesity and associated disorders

Bert Koletzko, University of Munich, Munich, Germany

The Southampton Women's Survey: from epidemiology to interventions and policy

Keith Godfrey, University of Southampton, Southhampton, UK

Long term effects of early life micronutrient interventions in undernourished settings

Parul Christian, Johns Hopkins University, Baltimore, USA

Antenatal dietary exposures and nutritional status on offspring health in undernourished settings

Sophie Moore, London School of Hygiene and Tropical Medicine, London, UK

11.30 – 13.30 Parallel Symposium

PS1-1 Developments in personalised nutrition: What's next?
T1 - 1.1 (Food4Me Project)

Chairs: Mike Gibney, University College Dublin, Dublin, Ireland José Alfredo Martinez, Universidad de Navarra, Pamplona, Spain Personalised nutrition, an introduction

Mike Gibney, University College Dublin, Dublin, Ireland

Exploring future opportunities and barriers for business model concepts in personalized nutrition Jo Goossens, Bio-Sense, Belgium

What do consumers think about personalised nutrition?

Lynn Frewer, Newcastle University Technology and Software in Personalised Nutrition, Newcastle, UK

Daniel Hannelore, Technische Universität München, Germany

Personalised nutrition intervention, how effective is personalised nutrition advice?

John Mathers, Newcastle University, Newcastle, UK

Is it right? The ethical and legal implications of personalised nutrition Ulf Görman, Lund University & Jönköping University, Jönköping, Sweden

14.30-16.00

Oral Communications

T1

Chair: Concepción Aguilera, University of Granada, Spain
Mª Jesús Moreno Aliaga, Departamento Ciencias de la
Alimentacion y Fisiologia, Facultad de Farmacia, Universidad de
Navarra, Pamplona, Spain

O001 - TUMOR SUPPRESSOR GLYCINE-N METHYLTRANSFERASE REGULATES ONE CARBON TRANSMETHYLATION KINETICS *E P. Chiang, National Chung Hsing University, Taiwan, China*

O002 - RELATIONSHIP BETWEEN VITAMIN A STATUS OF LACTATING SENEGALESE WOMEN AND THEIR 6 MONTHS OLD INFANTS S. Wade, Université Cheikh Anta Diop De Dakar, Senegal

O003 - GENOME-WIDE VARIANCE CONTRIBUTION OF GENOTYPE BY ERYTHROCYTE N-3 POLYUNSATURATED FATTY ACIDS INTERACTION TO DIABETES-RELATED TRAITS

J S. Zheng, Department Of Food Science And Nutrition, Zhejiang University, Hangzhou, China

O004 - THE METABONOMIC RESEARCH ON PRETERM INFANTS WITH NRDS

X. Liu, Clinic Department Of Guangzhou Women And Children Medical Centre, Beijing, China

O005 - THE EXPRESSION OF TASTE RECEPTOR HTAS2R FAMILY OF DIABETICS.

T. Takao, Faculty of Human Life and Environmental Science, Showa Women's University, Tokyo, Japan

O006 - LEPTIN RECEPTOR GENETIC VARIANTS ARE SEX-SPECIFIC ASSOCIATED WITH BMI IN OBESE CHILDREN

J. Olza, Department of Biochemistry and Molecular Biology II, University of Granada, Spain

O007 - THE MTHFR 677TT GENOTYPE AND ITS INTERACTION WITH RELATED B-VITAMINS IN HYPERTENSION

R. Reilly, Northern Ireland Centre for Food and Health (NICHE), University of Ulster, Coleraine, Co. Derry, Northern Ireland

O008 - PRECLINICAL EVALUATION OF THE INFLUENCE OF FEEDING WITH SLOW DIGESTING CARBOHYDRATES DURING PREGNANCY ON PROGRAMMING OFFSPRING METABOLIC HEALTH (NIGOHEALTH STUDY)

R. Rueda, Discovery R&D, Abbott Nutrition, Granada, Spain

16.00-16.30

Special Lecture

T1

Chair: Marta Garaulet, University of Murcia, Murcia, Spain

Chronobiology and obesity: The number 25, the initial point

Fred W. Turek, Charles E. & Emma H. Morrison, University in Evanston and Chicago, Illinois, USA

Machado and Picasso Rooms

08.00 - 10.00

Parallel Symposium

NPS1-2

T2 - 2.1

Efficacy of lipid-based nutrient supplements for prevention of maternal and infant undernutrition in Africa: Results of the iLiNS Project

Chairs: Kathryn Dewey, University of California, Davis, USA
Per Ashorn, University of Tampere School of Medicine, Finland

Introduction to the iLiNS Project
Kathryn Dewey, University of California, Davis, USA

Efficacy of reduced-cost formulations of LNS for infants and young children in Malawi: The iLiNS-DOSE study

Kenneth Maleta, University of Malawi, Malawi

Evaluation of the optimal amount of zinc to include in LNS for infants and young children: The iLiNS-ZINC study in Burkina Faso Sonja Hess, University of California, Davis, USA

Efficacy of LNS products for pregnant & lactating women: Pregnancy outcomes from the iLiNS-DYAD studies in Ghana and Malawi Seth Adu-Afarwauh, University of Ghana, Ghana Per Ashorn, University of Tampere School of Medicine, Tampere, Finland

Willingness to pay for LNS products and cost-effectiveness estimates for the iLiNS Project sites

Stephen A. Vosti, University of California, Davis, USA

Panel discussion of the iLiNS Project results and audience comments and questions

Purnima Menon, International Food Policy Research Institute Roland Kupka, Harvard School of Public Health, Boston, MA, USA Ellen Piwoz, Bill & Melinda Gates Foundation, Washington, DC, USA

11.30 - 13.30 PS1-2 **Parallel Symposium**

T2 - 2.3

Nutrition and lifestyle in adolescents: The HELENA study

Chairs: Stefaan De Henauw, Ghent University, Ghent, Belgium Luis Moreno, University of Zaragoza, Zaragoza, Spain

Perinatal nutrition and adolescent's health Fréderic Gottrand, University of Lille, Lille, France

Dietary intake in European adolescents: Issues and controversies Inge Huybrechts, International Agency for Research on Cancer, Lyon, France

Adolescent's physical inactivity: Causes and consequences Jonatan Ruiz, University of Granada, Granada, Spain

Vitamin status in adolescents: Is there a need for intervention? Marcela González-Gross, Universidad Politécnica de Madrid, Madrid, Spain

14.30-16.00

Oral Communications

T2

Chair: Mauro Fisberg, Department of Pediatrics, Escola Paulista de Medicina, Federal University of Sao Paulo, UNIFESP, Brazil
Esther Nova, Departamento de Metabolismo y Nutrición,
Instituto de Ciencia y Tecnología de Alimentos y Nutrición
(ICTAN-CSIC), Madrid, Spain

O009 - BREASTFEEDING ATTENUATES THE EFFECT OF LOW BIRTH WEIGHT ON ABDOMINAL ADIPOSITY; THE HELENA STUDY I. Labayen, Department of Nutrition and Food Sciences, University of the Basque Country, Vitoria, Spain

O010 - NUTRITION EFFECT OF YYB INTERVENTION ON 6-24 MONTHS INFANTS IN WENCHUAN EARTH QUACK REGION IN CHINA *J S. Huo, Institute of Nutrition and Food Safety, China*

0011 - INFANT MACRONUTRIENT INTAKE AND CARDIOVASCULAR STRUCTURES AND FUNCTION IN CHILDHOOD: THE GENERATION R STUDY

E H. van den Hooven, Department of Epidemiology, Erasmus MC, University Medical Center, Rotterdam, The Netherlands

0012 - MICRONUTRIENT DEFICIENCIES OF ADOLESCENT GIRLS IN CENTRAL MOZAMBIQUE – ZANE-STUDY

R. Freese, Division of Nutrition, University of Helsinki, Helsinki, Finland

O013 - IS THE CURRENT STATUS CONTRIBUTING TO REDUCE THE EXCLUSIVE BREASTFEEDING LENGHT?

A E M. Rinaldi, Graduation Program Of Nutrition In Public Health— School Of Public Health — University Of Sao Paulo (USP)/ School Of Medicine — Federal University Of Uberlandia, Uberlandia, Minas Gerais, Brazil

O014 - EFFECT OF ANIMAL-SOURCE FOODS AND MICRONUTRIENT-FORTIFICATION COMPLEMENTARY FOODS ON BODY COMPOSITION, LINEAR GROWTH, IRON STATUS – THE WINFOOD PROJECT IN CAMBODIA

J K H. Skau, Department of Nutrition, Exercise and Sports, Faculty of Science, University of Copenhagen, Denmark

 ${\tt O015}$ - MATERNAL LCPUFA STATUS DURING PREGNANCY AND CHILD INTERNALISING AND EXTERNALISING PROBLEMS. THE GENERATION R STUDY

J. Steenweg-de Graaff, The Generation R Study Group, Erasmus Medical Centre, Rotterdam, The Netherlands

O016 - VITAMIN B12 SUPPLEMENTATION OF BANGLADESHI WOMEN DURING PREGNANCY AND LACTATION INCREASES VITAMIN B12 IN BREAST MILK AND IMPROVES INFANT STATUS

T. Siddiqua, Program in International and Community Nutrition, University Of California, Davis, USA

16.00-16.30

Special Lecture

T2

Chair: Ricardo Uauy, University of Chile, Santiago de Chile, Chile

Omega-3 fatty acid sources for human health: what are the choices, what about sustainability?

Norman Salem

Falla Auditorium

08.00 - 10.00

Parallel Symposium

NPS1-3

T3 - 3.6

Nutrition and environmental sustainability (FAO)

Chairs: Harriet Kuhnlein, Centre for Indigenous People Nutrition and the Environment, Montreal, Canada Barbara Burlingame, FAO, Rome, Italy

Introduction: Diets, foods, and nutrients as ecosystem services *Barbara Burlingame, FAO, Rome, Italy*

Traditional food systems of indigenous peoples Harriet Kuhnlein, Centre for Indigenous People Nutrition and the Environment, Montreal, Canada

Developing guidelines, methods and indicators for sustainable diets Barbara Burlingame, FAO, Rome, Italy

Calculating environmental impacts of diets: The Mediterranean diet as a case study

Lluis Serra-Majem, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, Spain

Selected communications (various authors)

11.30 - 13.30

Parallel Symposium

PS1-3

T3 - 3.5

Global nutrition strategies (WHO)

Chair: Ramiro Lopez da Silva, UNSCN, World Food Programme UNSCN Chair

The place of food security and nutrition in the global development debate

Juliet Alphane, Food and Agriculture Organization of the United Nations, Rome, Italy

Goals, targets and indicators for the post 2015 development agenda Leslie Elder, World Bank, Washington DC, USA

Reducing stunting: targets, commitments, roadmap and achievements Werner Schultink, UNICEF, New York, USA

Aligning the world food supply to people's nutrition needs Francesco Branca, WHO, Geneva, Switzerland

Nutrition sensitive agriculture

Sean Kennedy, International Fund for Agricultural Development (IFAD), Rome, Italy

14.30-16.00

Oral Communications

T3

Chair: Stefaan De Henauw, Ghent University, Ghent, Belgium Marieta Fernández Cabrera, Centre of Biomedical Research, University of Granada, Spain

O017 - DIGESTIVE HEALTH AND BOWEL FUNCTION DURING THE MENSTRUAL CYCLE: THE EFFECT OF DIET AND HORMONAL CONTRACEPTIVE USE.

L. Dye, University Of Leeds, Leeds, UK

O018 - EVIDENCE ABOUT SUGAR-SWEETENED BEVERAGES AND WEIGHT GAIN: IS THE POTENTIAL FINANCIAL CONFLICTS OF INTEREST BIASING THE CONCLUSIONS?: A SYSTEMATIC REVIEW M. Bes-Rastrollo, Dept. of Preventive Medicine and Public Health, University of Navarra, Spain

0019 - IRON FORTIFICATION INTERVENTIONS: SYNTHESIS OF RESULTS FROM THREE RANDOMIZED TRIALS IN ASIA

J L. Finkelstein, Division of Nutritional Sciences, Cornell University, USA

0020 - PARENTAL SPORTS AND TV TIME AS MEDIATORS OF PARENTAL EDUCATION DIFFERENCES IN CHILDREN'S SPORTS AND TV TIME: THE **ENERGY-PROJECT**

J M. Fernández Alvira, GENUD (Growth, Exercise, Nutrition and Development) Research Group. Faculty of Health Sciences, University of Zaragoza, Zaragoza, Spain

0021 - RISK FACTORS FOR PRELACTEAL FEEDINGS IN SEVEN LATIN AMERICA AND CARIBBEAN COUNTRIES.

C. Boccolini, Department of Social Nutrition, Rio de Janeiro State University, Brasil

0022 - CALORIES AND ENERGY BALANCE: THE IMPORTANCE OF SMALL STEPS TO TRIGGER BIG CHANGE TOWARDS REVERSING OBESITY L. Sutherland, Dartmouth College, Hanover, NH, USA

0023 - HEMOCHROMATOSIS GENE (HFE) MUTATIONS AND THE RISK OF GASTRIC CANCER IN THE EUROPEAN PROSPECTIVE INVESTIGATION INTO CANCER AND NUTRITION STUDY

Agudo, Molecular Epidemiology Group, Translational Research Laboratory, Catalan Institute of Oncology-IDIBELL, Barcelona, Spain 0024 - THE SPANISH OBSERVATORY OF NUTRITION AND STUDY OF **OBESITY: A NECESSARY ACTION**

N. Perez-Farinos, Spanish Agency For Food Safety And Nutrition, Spain

16.00-16.30

Special Lecture

T3

Chair: Suzanne Murphy, University of Hawaii, USA

The role of policy and regulation in improving diets

Boyd Swinburn, Epidemiology and Biostatistics Department University of Auckland, New Zealand

Lorca Auditorium

08.00 - 10.00

Parallel Symposium

NPS1-4

Dietary lipids and the risk of common diseases

T4 - 4.1

Chairs: Teru Yanagita, Nishikyushu University and Saga University, Japan

Teruo Miyazawa, Tohoku University, Japan

Reduction of an overactive endocannabinoid system by dietary fat Sebastiano Banni, Dipartimento di Scienze Biomediche, Universitá di Cagliari, Cagliari, Italy

Significance of phosphatidylchline hydroperoxide in the pathogenicity of atherosclerosis

Teruo Miyazawa, Tohoku University, Japan

Lipids and risk of life-style related diseases Yung Sheng Huang, Department of Nutrition, I-Shou University, China Postprandial metabolism of docosapentaenoic acid (DPA, 22:5n-3) and eicosapentaenoic acid (EPA, 20:5n-3) in humans Andrew J Sinclair, Deakin University, School of Medicine (Metabolic Research Unit), Australia

Dietary lipids and the prevention of obesity and inflammation Teru Yanagita, Nishikyushu University and Saga University, Japan

10.30 – 11.30h Plenary Lecture

Chair: Jose Alfredo Martinez, Universidad de Navarra, Spain

The resolution of inflammation. Is there anything nutrients can do for it?

Charles N. Serhan, Harvard Institutes of Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts, USA

11.30 - 13.30h

Parallel Symposium

New York, USA

PS1-4

T4 - 4.4

IUNS Task Force
Scaling up prevention and treatment of malnutrition*

Chairs: Ricardo Uauy, University of Chile, Santiago de Chile, Chile Anna Lartey, University of Ghana, Legon, Ghana

The Waterlow Lecture: The SUN movement: in support of country-led action for improving people's nutrition

David Nabarro, Movement for Scaling Up Nutrition, United Nations,

Scaling-up prevention of stunting

Tahmeed Ahmed, Centre for Nutrition & Food Security ICDDR, Bangladesh

Scaling-up treatment of severe malnutrition: Challenges *Marie-Pierre Allié, Médecins Sans Frontiers, Paris, France*

Getting a country moving: Experience of Tanzania Rose Kingamkono, SUN Civil Society, Tanzania

Windows of opportunity

Shenggen Fan, Director General International Food Policy Research Institute (IFPRI), Washington DC, USA

*A Post-Discussion session will take place from 13.30 to 16.30 in Seminars 3, 4 and 5

14.30-16.00

Oral Communications

T4

Chairs:

Josefina Bressan, Universidade Federal de Viçosa. Departamento de Nutrição e Saúde, Viçosa-MG, Brazil David Jiménez Pavón, GENUD (Growth, Exercise, NUtrition and Development), Research Group, Research Fellow, Juan de la Cierva (MICINN), University of Zaragoza, Zaragoza, Spain O025 - EFFECTS OF DIETARY SUPPLEMENTATION WITH EICOSAPENTAENOIC ACID AND LIPOIC ACID IN HEALTHY OVERWEIGHT/OBESE WOMEN FOLLOWING AN ENERGY RESTRICTED DIET

A. Huerta, Department of Food Science and Physiology, University of Navarra, Pamplona, Navarra, Spain

O026 - IMPACT OF VITAMIN A AND ZINC ON DIARRHEAL E. COLI INFECTIONS AND ASSOCIATED DIARRHEAL EPISODES AMONG CHILDREN IN MEXICO CITY, MEXICO.

K. Long, School of Population Health, University of Queensland, Australia

O027 - INPATIENT MANAGEMENT OF INFANTS SUFFERING FROM ACUTE MALNUTRITION AND THEIR OUTCOME DEPENDING OF THEIRS CHARACTERISTICS

E. Chounfack, University of Ngaoundere, Cameroon

O028 - EFFECTS OF L-CARNITINE SUPPLEMENT ON PLASMA COAGULATION AND ANTICOAGULATION FACTORS IN HEMODIALYSIS PATIENTS

F. Hakeshzadeh, Faculty of Nutrition Sciences and Food Technology, Shahid Beheshti University of Medical Sciences, Tehran, Islamic Republic of Iran

O029 - THE BENEFICIAL EFFECTS OF THE RESMENA DIETARY PATTERN ON OXLDL IN PATIENTS WITH METABOLIC SYNDROME

R. De La Iglesia, Department of Nutrition, Food Science and Physiology. University of Navarra, Spain

O030 - EFFECT OF PHYSICAL ACTIVITY OR NUTRITION EDUCATION ON ANTHROPOMETRY AND BLOOD PRESSURE OF OVERWEIGHT OR OBESE ADOLESCENTS

R. Valdes-Ramos, Center for Research and Graduate Studies In Health Sciences, Faculty of Medicine, UAEM, México

0031 - NUTRITIONAL AND GENETIC DETERMINANTS OF CAROTID ATHEROSCLEROSIS, INFLAMMATORY CYTOKINES AND BONE MASS IN CHINESE ADULTS: A 3-YEAR PROSPECTIVE STUDY

Y. Chen, Department of Medical Statistics & Epidemiology, Sun Yat-Sen University, Guangzhou, China

O032 - EFFECTS OF ZINC SUPPLEMENTATION ON SERUM LEPTIN LEVEL AND INSULIN SENSITIVITY IN OBESE PEOPLE

L. Payahoo, Nutrition Research Center, Department of Nutrition, Faculty of Health And Nutrition, Tabriz University of Medical Science, Iran

O033 - ASSOCIATION BETWEEN THE IMPROVEMENT IN ANXIETY SYMPTOMS WITH WEIGHT LOSS IN SUBJECTS WITH METABOLIC SYNDROME

A. Perez-Cornago, Department of Nutrition, Food Science and Physiology. University of Navarra, Spain

16.00-16.30

Special Lecture

T4

Chair: James O Hill, Anschutz Health and Wellness Center, University of Colorado Anschutz Medical Campus, USA

Differential diagnosis and management in childhood obesities

Jesús Argente, Department of Paediatrics, Univesidad Autonoma de Madrid, Spain

Room B

08.00 **–** 10.00

Parallel Symposium

NPS1-5 T5 - 5.5 Methods and outcomes of nutritional assessment and health monitoring

Chairs: Ibrahim Elmadfa, University of Vienna, Vienna, Austria Cristina Campoy, University of Granada, Granada, Spain

Using biomarkers for the validation of nutrient reference intake values and to verify intake data in nutrition surveys Ibrahim Elmadfa, University of Vienna, Vienna, Austria

lodine status

Pauline Emmett, University of Bristol, Bristol, UK

Plasma levels of fatty acids-binding protein associated with antioxidant status

Eunju Park, Kyungnam University, Changwon, Republic of Korea

Evaluation of the water soluble vitamin-status in Austrian pregnant women

Petra Rust, University of Vienna, Vienna, Austria

Revision of the Chinese Iodine DRIs and some issues of USI Wanqi Zhang, W. Chen, M. LI, XL Ren, Q. Zhang, Tianjin Medical University, Tianjin, China

Indicators of healthy aging and age-related frailty Heiner Boeing, DIFE, Potsdam, Germany

11.30 - 13.30

Parallel Symposium

PS1-5 T5 The SMILING Project: A South East Asian-European collaborative action to prevent micronutrient deficiencies in women and young children in South-East Asia

Chairs: Emorn Wasantwisut, Institute of Nutrition, Mahidol
University, Bangkok, Thailand
Jacques Berger, Institute of Research for Development (IRD),
France

The SMILING project: A North-South-South collaborative action to prevent micronutrient deficiencies in women and young children in South-East,

Jacques Berger, Institute of Research for Development (IRD), France

SEA country situations: priority problems and national/specific programs

Siti Muslimatum, University of Indonesia, Indonesia Pattanee Winichagoon, Mahidol University, Salaya, Thailand

State-of-the-art of interventions to control micronutrient deficiencies Nanna Roos, University of Copenhagen, Conpenhagen, Denmark

Potential of food based approaches to control micronutrient deficiencies (mathematical modeling)

Elaine Fergusso, London School of Hygiene & Tropical Medicine, London, UK

Country intervention strategy evaluation by stakeholders Yves Kameli, Institute of Research for Development (IRD), France

Way ahead: SMILING in the global context Emorn Wasantwisut, Institute of Nutrition, Mahidol University, Thailand

14.30-16.00

Oral Communications

T5

Chairs: Sidiga Washi, United Arab Emirates University, UAE Mº Dolores Yago

O034 - VALIDATION OF THE INTERACTIVE TWENTY-FOUR HOUR RECALL METHOD AMONG GHANAIAN CHILDREN

D. Nketiah, Department of Nutrition And Food Science, University of Ghana, Legon, Ghana

O035 - BODY COMPOSITION OF KUWAITI CHILDREN; ESTABLISHMENT OF A STABLE ISOTOPE FACILITY FOR ASSESSMENT OF TOTAL BODY WATER IN KUWAIT

T. Al-Ati, Kuwait Institute for Scientific Research, Kuwait

O036 - PERCENTILE DISTRIBUTION OF ANTHROPOMETRIC VARIABLES OF BODY COMPOSITION IN PREGNANT WOMEN I. Rached-Sosa. Centro de Atención Nutricional Infantil Antímano

I. Rached-Sosa, Centro de Atención Nutricional Infantil Antímano CANIA, Caracas, Distrito Federal, Venezuela

O037 - GROUNDWATER IRON IN BANGLADESH: DOES IT CONTRIBUTE TO POPULATION IRON NUTRITION?

S. Rahman, Centre for Nutrition and Food Security, icddr, b, Dhaka, Bangladesh

O038 - IDENTIFYING KEY FOOD SOURCES OF VITAMIN A, IRON AND ZINC AND POTENTIAL FOOD FORTIFICATION VEHICLES IN BANGLADESH O. Bermudez, Tufts University School Of Medicine, Boston, USA

O039 - ADOLESCENT GIRLS IN INDONESIA ARE AT RISK OF INADEQUATE MICRONUTRIENT INTAKES

R. Indriasari, Nutrition Department, Facuty Of Public Health, Hasanuddin University, Indonesia

O040 - THE MAIN GROWTH PARAMETERS OF 7 AND 8 YEAR-OLD LITHUANIAN CHILDREN IN HISTORICAL PERSPECTIVE

A. Petrauskien, Institute of Health Research, Academy of Medicine, Lithuanian University of Health Sciences, Kaunas, Lithuania

O041 - CROSS-SECTIONAL ADIPOSITY AND LEAN MASS OF SIX MONTH OLD INFANTS DETERMINED BY DEUTERIUM OXIDE DOSE-TO-INFANT IN RURAL KENYA

S. Onyango-Omollo, Institute of Tropical and Infectious Diseases, University Of Nairobi, Kenya

O041B - METHODS OF MEASURING OVERWEIGHT AND OBESITY, AMONG 6-9 YEARS SCHOOL CHILDREN IN ALAIN CITY, UAE Sidiga Washi, United Arab Emirates University, UAE

16.00-16.30

Special Lecture

T5

Chair: Marion Hetherington, Department of Biopsychology, Institute of Psychological Sciences, University of Leeds, Leeds, UK

Sweetness, satiation, and satiety

France Bellisle, Faculty of Medicine, Laval University, Quebec. Centre de Recherche en Nutrition Humained'lle de France, Université Paris, Bobigny, France

Room C

08.00 - 10.00

Parallel Symposium

NPS1-6 T6 - 6.1 Diversity of physiological functions of amino acids and peptides

Chairs: Yoshiharu Shimomura, Nagoya University Graduate School of Bioagricultural Sciences, Japan Sidney M. Morris, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Amino acid profiling for clinical diagnosis and amino acid-based personalized nutrition

Yasushi Noguchi, Ajinomoto Co., Inc., Japan

Dietary supplementation with specific amino acid mixtures promotes mitochondrial biogenesis: physiological and pathophysiological relevance in mammals

Enzo Nisoli, Milan University, Milan, Italy

Physiological functions of soybean peptides. Hiroshi Hara, Hokkaido University Graduate School of Agriculture, Japan Recent advances in arginine metabolism: roles and regulation of the arginases.

Sidney M. Morris, Jr., University of Pittsburgh School of Medicine, Pittsburgh, PA USA

11.30 - 13.30

PS1-6 T6 - 6.1 **Parallel Symposium**

The PREVIEW Project

Chairs: Anne Birgitte Raben, University of Copenhagen, Copenhagen,
Denmark
Santiago Navas-Carretero, University of Navarra, Pamplona,
Spain

The role of diet in the prevention of type-2 diabetes (State-of-the art) *Jennie Brand-Miller, University of Sydney, Sydney, Australia*

Physical activity and the prevention of diabetes: Previewing the evidence

Gareth Stratton, Research into Exercise Activity and Children's Health Group (REACH), UK

Preview: prevention of diabetes through lifestyle intervention and population studies in Europe and around the world Anne Raben, University of Copenhagen, Copenhagen, Denmark

The preview-intervention trial: Design and methods Mikael Fogelholm, University of Helsinki, Helsinki, Finland

The preview-population studies: Design and methods Edith Feskens, Wageningen University, Wageningen, the Netherlands

14.30-16.00

Oral Communications

T6

Chairs: Mauro Serafini, Agricultural Research Council (CRA), Rome, Italy
Fermin Milagro, Department of Nutrition, Food Science and Physiology, University of Navarra, Pamplona, Spain

O042 - DADIZEIN SOY ISOFLAVONE AND ITS GUT METABOLITE, EQUOL: A REVIEW OF ANIMAL AND HUMAN STUDIES.

F. Bagherzadeh, Students' Research Committee, Faculty of Health & Nutrition, Tabriz University of Medical Sciences, Tabriz, Iran

O043 - EFFECT OF FRUCTOOLIGOSACCHARIDES AND GALACTOOLIGOSACCHARIDES IN GERM FREE MICE M. Ortega González, Department of Biochemistry and Molecular Biology II. School of Pharmacy. University of Granada. Granada, Spain

O044 - DEVELOPMENT OF MULTIFUNCTIONAL BAKERY BIO-INGREDIENTS CONTAINING TWO IMPORTANT VITAMINS, FOLATE AND B12

J. Sych, Institute of Food and Beverage Innovation, Zurich University of Applied Sciences, Zurich, Switzerland O045 - ANTI-INFLAMMATORY EFFECTS OF HYDROALCOHOLIC EXTRACT FROM EUTERPE OLERACEA MART. (AÇAÍ)

J. Daleprane, Department of Basic and Experimental Nutrition, Institute of Nutrition, State University of Rio de Janeiro, Brazil

O046 - COMPARING THE EFFECT OF PROBIOTIC AND CONVENTIONAL YOGHURT CONSUMPTION ON LIPID PROFILE IN PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD)

S. Nabavi, Students' Research Committee, Faculty of Nutrition, Tabriz University of Medical Sciences, Tabriz, Iran

O047 - ROLE OF POLYPHENOL JUICE DRINKS IN THE PREVENTION OF POSTPRANDIAL INFLAMMATORY STRESS IN HUMANS M. Serafini, CRA-Ex-INRAN, Italy

 ${\tt O048}$ - The effect of daily orange juice consumption on blood lipids, in overweight men

I. Macdonald, School of Biomedical Sciences, University of Nottingham, Nottingham, UK

O049 - A FRAXINUS EXCELSIOR L. SEED EXTRACT, FRAXIPURE® HAS FAVORABLE EFFECTS ON GLUCOSE HOMEOSTASIS IN ELDERLY OVERWEIGHT SUBJECTS

J. Flanagan, Naturex Spain S.L. Valencia, Spain

16.00-16.30

Special Lecture

T6

Chair: Ascensión Marcos, Spanish National Research Council (CSIC), Madrid, Spain

Modulation of the gut microbiota by nutrients with prebiotic and probiotic properties

Nathalie Delzenne, Université Catholique de Louvain, Louvain, Belgium

Machuca and Albéniz Rooms

08:00 - 10:00

Parallel Symposium

NPS1-7

IUNS Task Force

T7

The role of nutraceuticals in health along with basic nutrition

Chairs: Vishveshwaraiah Prakash, Council member of IUFFoST and IUNS distinguished scientist of CSIR, India Olga Martínez, CIBERehd, University of Granada, Granada, Spain

Global nutrient security and nutrient bioavailability
Huub Lelieveld, President of the Global Harmonization Initiative, The
Netherlands

Ancient wisdom and nutraceuticals - International perspective Lekh R. Juneja, Taiyo Kagaku Co., Ltd., Japan

Drug-induced nutrient depletion: Unmet clinical need or label warning?

Maruthi Prasad Palthur, Indigene Pharmaceuticals, Inc, Los Angeles, New Jersey, USA.

Mapping Fruit, Vegetable and Phytonutrient Consumption Globally Yumei Li, Group Leader, Supplement Product Development, Amway Corporation, USA

11.30 - 13.30

Parallel Symposium

PS1-7 T7 – 7.6 Cultural differences in diet and nutrition across Europe. Impact on health (FENS)

Chairs: Ascensión Marcos, President of FENS, Spanish National Research Council (CSIC), Madrid, Spain Denis Lairon, Vice President of FENS

Is the Mediterranean diet the best one in Europe?

Marisa Porrini, Department of Food, Environmental and Nutritional
Sciences, University of Milan, Milan, Italy

Does local diet lead to a more sustainable diet? Inga Thorsdottir, School of Health Sciences, University of Iceland, Reykjavik, Iceland

Diet and health in the middle of Europe.

Heiner Boeing, Department of Epidemiology, German Institute of Human Nutrition Potsdam-Rehbruecke, Potsdam, Germany

Nutrition and politic - eastern countries' effect of the transformation Małgorzata Schlegel-Zawadzka, Institute of Public Health, Jagiellonian University Medical College, Krakow, Poland

14.30-16.00

Oral Communications

T7

Chairs: Anura V. Kurpad, St John's Medical College, Bangalore, India Theodora Mourathidou, European Commission, Joint Research Centre, Institute for Health and Consumer Protection (IHCP), Public Health Policy Support Unit, Ispra, Italy

 ${\tt O050}$ - Relapses from acute malnutrition in a community-based management program in Burkina-Faso

Y E. Somasse, Ecole de Santé Publique, Université Libre De Bruxelles, Brussels, Belgium

0051 - NATIONAL DIETARY SURVEY (NDS): FAMILIAL AGGREGATION OF DIETARY PATTERNS IN BRAZIL

E. Yokoo, Institute of Community Health of Fluminense Federal University, Niterói, Rio de Janeiro, Brazil

O052 - THE MEDITERRANEAN DIET IMPROVES THE LOW-DENSITY LIPOPROTEIN PARTICLE SIZE PHENOTYPE IN MEN WITH METABOLIC SYNDROME

C. Richard, Institute of Nutrition and Functional Foods, Laval University, Quebec, Quebec, Canada

O053 - IMPACT OF FORTIFIED FOODS DURING LAST DECADE IN THE NETHERLANDS

C. Van Rossum, National Institute For Public Health And The Environment (RIVM), Bilthoven, The Netherlands

O054 - FOOD SECURITY AND NUTRITIONAL STATUS OF FISHING COMMUNITIES IN THE BOLIVIAN AMAZON BASIN

S. Baker French, Faculty of Land and Food Systems, University Of British Columbia, Vancouver, BC, Canada

O055 - WEIGHT OF MODERNITY PART II: THE NUTRITION AND HEALTH IMPLICATIONS OF THE DISAPPEARING AUSTRALIAN DESSERT *C. Banwell, National Centre for Epidemiology and Population Health, Australian National University, Canberra, Australia*

O056 - DIETS OF MALIAN AND MOROCCAN PEOPLE LIVING IN THEIR HOME COUNTRIES AND IN FRANCE AND ITS ASSOCIATION WITH ECONOMIC STATUS

S. Fortin, UMR 204 Nutripass, IRD-UM2-UM1 - Institut De Recherche Pour Le Développement (IRD), Montpellier, France

O057 - UPGRADE ON THE NUTRITIONAL TRANSITION IN BOLIVIA F J A. Perez-Cueto, Aalborg University, Meal Science and Public Health Nutrition Research Unit (MENU), Copenhagen NV, Denmark

16.00-16.30

Special Lecture

T7

Chair: Alan Jackson, Continuous Update Project, University of Southampton, Southhampton, UK

Maternal nutrition and birth outcomes

Zulfigar Bhutta, The Aga Khan University, Pakistan

Room D

08.00 - 10.00

Parallel Symposium

NPS1-8

T8 - 8.1

IUNS Task Force

IMAPP (Intake, Monitoring and Program Planning): Software nutrient intake data

Chairs: Lindsay Allen, USDA, ARS Western Human Nutrition Research Center, Davis, CA, USA

> Emilio Martínez de Victoria, Institute of Nutrition and Food Technology, University of Granada, Granada, Spain

Intake, monitoring and planning program (IMAPP) – what are its capabilities?

Alicia Carriquiry, Iowa State University, USA

Using the IMAPP software; information required for optimal application

Suzanne Murphy, University of Hawaii, USA

Harmonizing micronutrient recommendations world-wide Lindsay Allen, USDA, ARS Western Human Nutrition Research Center, Davis, CA, USA

Application of the IMAPP for planning, monitoring and evaluation of flour fortification programs

Helena Pachon, the Flour Fortification Initiative, Emory University, Atlanta, GA, Estados Unidos

Establishing desirable fortificant levels for calcium, iron and zinc in foods for infant and young child feeding: Examples from three Asian countries

Rosalind Gibson, Department Human Nutrition, University Of Otago, Dunedin, New Zealand

11.30 - 13.30

Parallel Symposium

PS1-8 T8 - 8.1 Food-based approaches to improve multiple micro-nutrient deficiencies and protein quality

Chairs: Suzanne Murphy, University of Hawaii, USA
Miguel Navarro, Department of Nutrition and Food Sciences,
University of Granada, Spain

Introduction and overview of global micro-nutrient deficiency and protein quality

Charlotte G. Neumann, Fielding School of Public Health and David Geffen School of Medicine, Ucla, USA

Dietary approaches to diet quality improvement Suzanne Murphy, University of Hawaii, Hawaii, USA

Complementary feeding recommendations from locally available foods *Umi Fahmida, University of Indonesia, Indonesia*

Effect of food-based supplement prior to and during pregnancy on birth weight and prematurity in rural Vietnam (vinavac study)

Tu Ngu, Vietnam Nutrition Association, Vietnam

Meat intervention in Chinese infants
Nancy Krebs, University of Colorado, Denver, USA

Food-based approaches in Ethiopia
Barbara Stoecker, Oklahoma State University, USA

Use of omena fish in Kenya, Constance Gewa, George Mason University, USA

Community interventions for dietary improvement in Ghana Grace S. Marquis, McGill University and Esi Colecraft, University of Ghana, Ghana

Meat vs. soy biscuit intervention trial in HIV drug naïve Kenyan women and children

14.30-16.00

T8

Oral Communications

Chairs: Maria Daniel Vaz de Almeida, Faculty of Nutrition and Food Sciences, University of Porto, Porto, Portugal Miguel Navarro, Department of Nutrition and Food Sciences, University of Granada, Spain

O058 - INFLUENCE OF PROXIMATE VALUES ON VITAMIN A STABILITY OF NIGERIAN WHEAT FLOUR AND BREAD

F. Uchendu, National Open University of Nigeria, Lagos

O059 - THE DISTRIBUTION AND CONTENT OF FOUR PURINES IN 600 COMMON FOOD

Y. Yang, Institute of Nutrition and Food Safety, Chinese CDC

O060 - NUTRITIONAL AND TOXICOLOGICAL ANALYSES OF LEAVES AND FRUITS OF SOLANUM MACROCARPON LINN (SOLANACEAE) IN COTONOU (BENIN)

V. Dougnon, Polytechnic School of Abomey-Calavi, Research Laboratory in Applied Biology, University of Abomey-Calavi, Cotonou, Benin

O061 - AN EVALUATION OF THE HEALTH AND ECONOMIC IMPACT OF THE CURRENT NATIONAL POLICY TO ELIMINATE TRANS FAT ACIDS (TFA) IN ARGENTINA

A. Rubinstein, CESCAS, Institute for Clinical Effectiveness and Health Policy, Boston, USA

O062 - LEAF PROTEIN CONCENTRATES FROM INDIGENOUS PLANTS FOR IMPROVING NUTRITIONAL QUALITY OF LOCAL FOODS IN THE GARHWAL HIMALAYAS, INDIA

A. Dutta, G.B.Pant University of Agriculture & Technology, Teheri Garhwal, India

O063 - EVALUATION OF MACRO AND MICRO NUTRIENT COMPOSITION ON SOME PROCESSED LESSER KNOWN GREEN LEAFY VEGETABLES IN SOUTH EAST NIGERIA

O. Grace Taiwo Olawale, University of Nigeria Nsukka, Nigeria

O064 - THE HIGHER THE INTAKE OF PROCESSED AND ULTRA-PROCESSED FOOD PRODUCTS, THE LOWER THE AMOUNT OF FRUITS IN THE BRAZILIAN DIET.

A P. Martins, Núcleo de Pesquisas Epidemiológicas em Nutrição E Saúde - NUPENS/USP, Brazil

O065 - STUNTING AMONG CHILDREN UNDER TWO IN RURAL NEPAL: THE ROLE OF WOMEN'S EMPOWERMENT IN AGRICULURE K. Cunningham, Department of Population Health, London School of Hygiene and Tropical Medicine, London, UK

Assessing and improving the quality of food composition databases for nutrition and health applications

Paul Finglas, Institute of Food Research, UK

Tuesday, September 17th

Andalucía Rooms

08.00 - 10.00

Parallel Symposium

PS2-9 T1 – 1.4 Biomarkers of nutrition for development: An overview (BOND)

Chairs: Daniel J Raiten, U.S. National Institutes of Health, Bethesda, MD USA

BOND overview and summary of expert panel reports

Daniel J Raiten, Eunice Kennedy Shriver National Institute of Child

Health and Human Development (NICHD), National Institutes of Health
(NIH)

Ian Darnton-Hill, University of Sydney, Sydney, Australia

Demo of BOND website and query based system

Kripa Raghavan, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), National Institutes of Health (NIH)

Addressing cross-cutting issues

Fayrouz Ashour, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), National Institutes of Health (NIH)

Roadmap for BOND: A Panel Discussion and interaction with the audience

Ian Darnton-Hill, University of Sydney, Sydney, Australia

BOND overview and summary of expert panel reports

11.30 - 13.30

Parallel Symposium

PS2-17

T1 - 1.4

Immunonutrition in health and disease

Chairs:Ascensión Marcos, Spanish National Research Council (CSIC), Madrid, Spain

> Roxana Valdés, Center for Research and Graduate Studies in Health Sciences (CIEACS), Faculty of Medicine, Autonomous University of Mexico D.F, Mexico

Administration of polyphenol-enriched nutraceuticals to elderly people and effects on the immune responsiveness Emilio Jirillo, University of Bari, Bari, Italy

Probiotics as protective agents against Enterobacteria Gabriela Perdigón, University of Tucumán, Tucumán, Argentina

Geography and the immunoinflammatory processes in overweight and obesity

Roxana Valdés, Centre for Research and Graduate Studies in Health Sciences, Autonomous University of Mexico D.F., Mexico Immunomodulatory role of mother's milk

Jorge Mujico, Spanish National Research Council (CSIC), Madrid, Spain

14.30-16.00

Oral Communications

T1

Chairs: Lynette Ferguson, University of Auckland, Auckland, New Zealand

Pedro González Muniesa, Department of Nutrition, Food Science and Physiology, University of Navarra, CIBER Fisiopatología de la Obesidad y Nutrición (CIBERobn), Pamplona, Navarra, Spain

O066 - TOTAL ENERGY AND SATURATED FAT INTAKE MODULATE THE ASSOCIATION BETWEEN AN OBESITY GENETIC RISK SCORE AND BMI P. Casas Agustench, Nutrition and Genomic Laboratory, Jean Mayer United States Department of Agriculture Human Nutrition Research Center on Aging at Tufts University, Boston, MA, USA

O067 - OBESITY IN ADOLESCENTS FROM SOUTH OF EUROPE VERSUS CENTER-NORTH OF EUROPE: ROLE OF PHYSICAL ACTIVITY, DIET AND GENETICS

F B. Ortega, Department of Physical Educacion and Sports, Faculty of Sport Sciences, University of Granada, Granada, Spain

O068 - RIBOFLAVIN LOWERS BLOOD-PRESSURE IN HYPERTENSIVE 'S WITH THE MTHFR 677TT GENOTYPE

M. Ward, Northern Ireland Centre for Food and Health, University of Ulster, Coleraine, N Ireland

O069 - CHRONO-NUTRITION: MOLECULAR MECHANISM OF DISRUPTION OF LIVER CLOCK BY IRREGULAR FEEDING H. Oda, Laboratory of Nutritional Biochemistry, Nagoya University

0070 - DIETARY LOW PROTEIN COMBINED WITH HIGH FAT INDUCES ABDOMINAL FAT ACCUMULATION IN RATS

L. Otani, Food for Life, Organization for Interdisciplinary Research Projects, The University of Tokyo, Japan

O071 - THE ANTI-PROLIFERATIVE EFFECT OF BOWMAN-BIRK INHIBITORS ON HT29 COLON CANCER CELLS IS ASSOCIATED WITH THE INHIBITION OF SERINE PROTEASES

A. Clemente, Department of Physiology and Biochemistry of Animal Nutrition, Estacion Experimental Del Zaidin (CSIC), Granada, Spain

O072 - ALDOSE REDUCTASE (AR) ACTIVITY IN RBCS & AR ACTIVITY AND EXPRESSION IN TUMORS OF HUMAN CANCER SUBJECTS U. Putcha, Division of Pathology, National Institute Of Nutrition, Hyderabad, Andhra Pradesh, India

O073 - INFLUENCE OF DIET ON COLONIC FERMENTATION AND ENDOGENOUS FORMATION OF N-NITROSO COMPOUNDS S W. Gratz, Rowett Institute of Nutrition and Health, University of Aberdeen, UK

16.00-16.30

Special Lecture

T1

Chair: Linda Lovegrobe

Challenges for molecular nutrition research

Mike Gibney, University College Dublin, Dublin, Ireland

Machado and Picasso Rooms

08.00 - 10.00

Parallel Symposium

PS2-10 T2 - 2.5 **Energy balance and active living** (ILSI North America and ILSI Europe)

Chairs: James O. Hill, Anschutz Health and Wellness Center, University of Colorado Anschutz Medical Campus, Denver, USA Marcela González-Gross, Universidad Politécnica de Madrid, Madrid, Spain

Perspective on the Influence of diet/food consumption on energy balance

Gregorio Varela Moreiras, Universidad CEU San Pablo, Madrid, Spain

Complexity of methodologies for studying energy balance David Allison, University of Alabama, Birmingham, LA, USA

Physical activity: impact on mortality and morbidity Steven Blair, Arnold School of Public Health, University of South Carolina, Columbia, USA

Perspective on the influence of physical activity on energy balance John Blundell, Institute of Psychological Sciences, University of Leeds, Leeds, UK

11.30 - 13.30

Parallel Symposium

Healthy life style promotion

PS2-18 T2 - 2.1

> Chairs: Jonatan Ruiz, University of Granada, Granada, Spain Francisco B. Ortega, Department of Physical Educacion and Sports, Faculty of Sport Sciences, University of Granada, Granada, Spain

Lifestyle interventions on weight loss and cardiometabolic risk factors Bret H. Goodpaster, University of Pittsburgh, PA, USA

Combined effect of exercise and diet on fat mass and leptin resistance José L Calbet, Universidad de las Palmas de Gran Canaria, Las Palmas de Gran Canaria, Spain

Dose response effect of aerobic vs resistance training: Evidence from randomized controlled trials

Steven N. Blair, University of South Carolina, USA

Gene × healthy lifestyle interactions in type 2 diabetes

Paul Franks, Genetic & Molecular Epidemiology Unit, Clinical Research
Center, Skåne University Hospital, Lund University, Malmö, Sweden

14.30-16.00

Oral Communications

University, Kenya

T2

Chairs: Antonio Sánchez Pozo, University of Granada, Granada, Spain Francisco B. Ortega, Department of Physical Educacion and Sports, Faculty of Sport Sciences, University of Granada, Granada, Spain

O074 - MATERNAL OBESITY, PRE-PREGNANCY AND GESTATIONAL DIABETES AND IMPACT ON BIRTH SIZE OF OFFSPRING, AUSTRALIA *P H. Lahmann, School of Population Health, University of Queensland, Herston Road, Herston, Australia*

O075 - LOW OMEGA-3 INDEX IN PREGNANCY IS A POSSIBLE BIOLOGICAL RISK FACTOR FOR POSTPARTUM DEPRESSION M. W. Markhus, National Institute of Nutrition and Seafood Research (NIFES), Bergen, Norway

O076 - EFFICACY OF DRIED AMARANTH LEAVES (AMARANTHUS CRUENTUS) CONSUMPTION ON VITAMIN A, IRON AND ZINC OF CHILDREN IN KAJIADO COUNTY, KENYA

P. Chege, Department of Food, Nuttrition and Dietetics, Kenyatta

O077 - FIRST TRIMESTER FOLIC ACID SUPPLEMENTATION ENHANCES FOLATE STATUS THROUGHOUT PREGNANCY AND REDUCES THE EFFECT OF THE MTHFR 677C>T POLYMORPHISM.

O. Bueno, Area of Preventive Medicine and Public Health, Faculty of Medicine and Health Sciences, Universitat Rovira i Virgili (URV), IISPV, Reus, Spain

O078 - THE DIETARY PATTERNS OF MOTHERS DURING PREGNANCY, THEIR CHILD AT AGE FIVE YEARS AND CHILD WEIGHT STATUS.

C. Murrin, School of Public Health, Physiotherapy, and Population Science, University College Dublin, Dublin, Ireland

O079 - CELL PHONE BASED PEER COUNSELING TO SUPPORT EXCLUSIVE BREASTFEEDING IS ASSOCIATED WITH MORE FREQUENT HELP AND DECREASED BREASTFEEDING PROBLEMS

E. Kamau-Mbuthia, Department of Human Nutrition, Egerton University, Njoro, Kenya

O080 - EFFECT OF BREASTFEEDING PATTERN ON GROWTH AND MOTOR MILESTONE DEVELOPMENT OF INFANTS ATTENDING BABY CLINIC IN A NIGERIAN TEACHING HOSPITAL

H. Ene-Obong, Department of Biochemistry (Nutrition Unit), University of Calabar, Calabar, Cross River State, Nigeria

0081 - THE DIETARY EFFECT OF SERVING SCHOOL MEALS BASED ON THE NEW NORDIC DIET - A RANDOMISED CONTROLLED TRIAL IN **DANISH CHILDREN**

R. Andersen, Division Of Nutrition, National Food Institute, Technical University of Denmark, Denmark

O194 - TOWARD GUIDELINES FOR MATERNAL AND INFANT NUTRITION TO INFLUENCE LONG-TERM HEALTH OF THE OFFSPRING: THE PAST AND FUTURE OF ILSI EUROPE WORK ON METABOLIC IMPRINTING R. Rueda, Department of Research and Development, Abbott Nutrition, Granada, Spain

16.00-16.30

Special Lecture

T2

Chair: Luis Moreno, University of Zaragoza, Zaragoza, Spain

Towards body composition reference data for children and adolescents

Jonathan C Wells, University College London, London, UK

Falla Auditorium

08.00 - 10.00

Parallel Symposium

PS2-11 T3 - 3.2 Global challenges in maternal and child nutrition for today and the future

Chairs: Susan Walker, Tropical Medicine Research Institute, The University of the West Indies, Mona Campus, Jamaica Isabel Polanco, Full Professor of Pediatrics, Autonomous University of Madrid, Madrid, Spain

Prevalence of maternal and child undernutrition and childhood obesity and consequences for health and human capital

Robert Black, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Nutrition-sensitive developments

Marie T. Ruel, International Food Policy Research Institute (IFPRI), Washington DC, USA

What can be done and what will it cost?

Zulfiqar Bhutta, The Aga Khan University and Medical Center, Pakistan

Securing and sustaining the political momentum for addressing malnutrition

Stuart Gillespie, International Food Policy Research Institute (IFPRI), UK

Closing comments

Anna Lartey, University of Ghana, Legon, Ghana

11.30 - 13.30

Parallel Symposium

PS2-19

Confronting the global epidemic of non-communicable diseases: findings from the NHLBI/UHG Global Network

Chairs: Benjamin Caballero, International Health, Johns Hopkins

T3 - 3.2

Bloombergs School of Public Heatlh Baltimore, USA Antonio Sanchez-Pozo, University of Granada, Granada, Spain

The NIH NHLBI/UHG centers of excellence: A model for international research collaboration

Cristina Rabadan-Diehl, NHLBI Office of Global Health, USA

Primary prevention of nutrition-related chronic diseases: Innovative interventions in latin america

Manuel Ramirez-Zea, INCAP Research Center for the Prevention of Chronic Diseases, Guatemala

China rural health initiative – sodium reduction study: A cluster randomized trial on a community-based dietary sodium reduction program

Lijing Yan, China International Center for Chronic Disease Prevention, China

Baseline characteristics of a school based intervention to promote healthy diet in Sousse, Tunisia

Hassen Ghannem, University Hospital FarhatHached, Tunisia

14.30-16.00

Oral Communications

T3

Chairs: Inge Huybrech, International Agency for Research on Cancer, Lyon, France Jonatan Ruiz, University of Granada, Granada, Spain

O082 - PRESCHOOL FOOD AND DRINK PROVISION AND CONSUMPTION IN EARLY YEARS EDUCATION AND CARE SETTINGS IN ENGLAND *M. Nelson, Children's Food Trust, Sheffield, UK*

O083 - INTAKE OF WHOLE GRAINS AND INCIDENCE OF GASTRIC AND OESOPHAGEAL CANCER IN THE HELGA COHORT G. Skeie, Department Of Community Medicine, University Of Tromsø, Tromsø, Norway

O084 - PHYSICAL ACTIVITY LEVELS AMONG COLOMBIAN ADULTS: INEQUALITIES BY SEX AND SOCIOECONOMIC STATUS S. González, Department of Public Health, School of Medicine, Universidad de los Andes, Bogotá, Colombia

O085 - CONSUMPTION OF ULTRA-PROCESSED PRODUCTS IS ASSOCIATED WITH OBESITY IN ADOLESCENTS AND ADULTS IN BRAZIL M. L. C. Louzada, School of Public Health/University of Sao Paulo, Brazil

O086 - COMPARISON OF MUAC AND PERCENT WEIGHT GAIN AS DISCHARGE CRITERION IN A LARGE TFP PROGRAM IN BURKINA FASO - 2007-2011

S. Cohuet, Epicentre Medecins Sans Frontieres, France

O087 - DAILY SODIUM CONSUMPTION AND CARDIOVASCULAR MORTALITY IN GENERAL POPULATION. SYSTEMATIC REVIEW AND META-ANALYSIS OF PROSPECTIVE STUDIES

R. Poggio, Institute for Clinical Effectiveness and Health Policy (IECS), Buenos Aires, Argentina

O088 - DIETARY PROTEIN INTAKE AND THE INCIDENCE OF TYPE 2 DIABETES IN EUROPE: THE EPIC-INTERACT CASE-COHORT STUDY M. van Nielen, Division of Human Nutrition, Wageningen University, Wageningen, The Netherlands

O089 - LOW DIETARY DIVERSITY IS ASSOCIATED WITH CHILD STUNTING IN RURAL ETHIOPIA

E. Custodio, Centro Nacional de Medicina Tropical, Instituto de Salud Carlos III, Madrid, Spain

16.00-16.30

Special Lecture

T3

Chair: Mikael Fogelholm, University of Helsinki, Finland

Energy balance and obesity

James O. Hill, Anschutz Health and Wellness Center, University of Colorado Anschutz Medical Campus, USA

Lorca Auditorium

08.00 - 10.00

Parallel Symposium

PS2-12 T4 – 4.3 Food, nutrition, physical activity and cancer – Keeping the evidence current: WCRF/AICR Continuous Update Project (CUP) - (WCRF)

Chairs: Alan Jackson, Continuous Update Project, University of Southampton, UK Marieta Fernández, Centre of Biomedical Research, University

of Granada, Spain

Evidence based recommendations for prevention of cancer and other chronic diseases the 2007 and 2009 WCRF/AICR Reports

Martin Wiseman, Continuous Update Project WCRF International, UK

The WCRF/AICR Continuous Update Project – Aims and Process Teresa Norat, Continuous Update Project WCRF International, UK

The WCRF/AICR Continuous Update Project –Systematic Reviews on Nutrition, Physical Activity and Health Outcomes in Cancer Survivors Anne McTiernan, Fred Hutchinson Cancer Research Center, USA

The WCRF/AICR Continuous Update Project-Systematic Reviews of Animal and Human Mechanistic Studies in Relation to Food, Nutrition, Physical Activity and Cancer

Martin Wiseman, Continuous Update Project WCRF International, UK

WCRF/AICR Continuous Update Project (CUP) & Future Implications Alan Jackson, Continuous Update Project, University of Southampton, UK

10.30 - 11.30 Plenary Lecture

Chair: Emorn Wasantwisut, Institute of Nutrition, Mahidol University, Bangkok, Thailand

Micronutrient Research, Programs and Policy: From Meta-analyses to Metabolomics

Lindsay Allen (E.V. McCollum lecture), USDA, ARS Western Human Nutrition Research Center, Davis, CA, USA

11.30 – 13.30 Parallel Symposium

PS2-20 T4 - 4.1 Tackling obesity in pre-school children: First results from the ToyBox Study

Chairs: John J Reilly, Strathclyde University, Scotland Concepción Aguilera, University of Granada, Spain

Preschool childhood obesity: A review of existing studies and the first results of the ToyBox-study

Yannis Manios, Harokopio University, Athens, Greece

Pre-school children's physical activity and sedentary behaviours Ilse De Bourdeaudhuij, University of Ghent, Belgium

Pre-school children's food intake and snacking habits and their determinants

Luis Moreno, University of Zaragoza, Zaragoza, Spain

Development and implementation of the ToyBox intervention Berthold Koletzko, Ludwig Maximilians University, Munich, Germany

14.30-16.00 Oral Communications

T4

Chairs: Theodora Hanjieva-Darlenska, Department of pharmacology and toxicology, Faculty of Medicine, Medical University, Sofia, Bulgaria

> Fermin Sanchez de Medina, Department of Pharmacology, University of Granada, Granada, Spain

O090 - DNA DAMAGE AND CHROMOSOMAL STABILITY IN HEALTHY AND DIABETIC INDIVIDUALS AND THE IMPACT OF VEGETABLES AND WALNUT OIL

K H. Wagner, Department of Nutritional Sciences, University of Vienna, Vienna, Austria

O091 - IMPACT OF RELATIVE PROTEIN INTAKE DURING SEVERE ENERGY RESTRICTION ON BODY COMPOSITON AND RESTING ENERGY EXPENDITURE IN OBESE ADULTS

N. Byrne, School of Exercise and Nutrition Sciences & Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Queensland, Australia

O092 - NUTRITIONAL STUDY WITH FUNCTIONAL OMEGA-3 ENRICHED MILK IN CELIAC DISEASE PATIENTS. THE CIBOM STUDY.

J. Fonollá, Departamento de Nutrición. Facultad de Farmacia. Universidad Complutense de Madrid, Spain

O093 - EFFECTS OF TWO ENERGY-RESTRICTED DIETS DIFFERING ON PROTEIN CONTENT ON THE INFLAMMATION STATE OF OBESE SUBJECTS WITH METABOLIC SYNDROME FEATURES *P. Lopez-Legarrea, Department of Nutrition, Food Science and Physiology, University of Navarra, Spain*

O094 - INCREASING ENERGY AND ZINC INTAKES TO LEVEL RECOMMENDED BY WHO IMPROVE FAT-FREE MASS BUT NOT ZINC STATUS IN HIV/AIDS PEOPLE

A. Badiane, Laboratoire De Nutrition, Département de Biologie Animale, Faculté des Sciences et Techniques, Université Cheikh Anta Diop De Dakar, Senegal

0095 - LIFESTYLE RECOMMENDATIONS FOR CANCER PREVENTION AND SURVIVAL AFTER DIAGNOSIS OF COLORECTAL CANCER: RESULTS FROM THE EPIC STUDY

D. Romaguera, Research Unit, University Hospital Son Espases, Spain

O096 - DID THE CYCLONE "SENDONG" IN PHILIPPINES AFFECT MALNUTRITION LEVELS OF CHILDREN IN THE PHILIPPINES? *E. Rivero, Acción Contra El Hambre, Madrid, Spain*

0097 - DIETARY CAROTENOIDS AND BREAST CANCER RISK AMONG CHINESE WOMEN

C. Zhang, Department of Medical Statistics and Epidemiology, Sun Yat-Sen University, Guangzhou, People's Republic of China

16.00-16.30

Special Lecture

T4

Chair: Rosaura Leis, Lecturer Department of Pediatrics, University of Compostela, Spain

Nutritional rickets around the world

Gail Goldberg, MRC Human Nutrition Research, Cambridge, UK

Room B

08.00 - 10.00 PS2-13 T5 - 5.4

Parallel Symposium

Harmonization of human zinc requirements and country experiences in assessing population zinc status

Chairs: Rosalind Gibson, University of Otago, New Zealand Emorn Wasantwisut, Institute of Nutrition, Mahidol University, Bangkok, Thailand

Harmonization of estimates of human zinc requirements, including safe upper intake levels

Kenneth Brown, University of California, USA

Recommendations for assessing individual zinc status and population risk of zinc deficiency (BOND, EURRECA and IZINCG conclusions)

including updated results of national food balance sheets to estimate the risk of inadequate dietary zinc intake K Ryan Wessells, University of California, USA

National experience in assessing the risk of zinc deficiency – Pakistan Zulfiqar Bhutta, Aga Khan University, Pakistan

Prevalence of zinc deficiency in Mexican children and women of childbearing age

Silvador Villalpando, Instituto Nacional de Salud Pública, Cuernavaca, Mexico

National experience in assessing the risk of zinc deficiency – Cameroon Reina Engle-Stone, University of California, Davis, USA

11.30 - 13.30 PS2-21 T5 - 5.1

Parallel Symposium Assessment of body composition from birth to 2 years

Chairs: Ricardo Uauy, University of Chile, Santiago de Chile, Chile John Shepherd, University of California, San Francisco, USA

Structure and function - the importance of body composition assessment during early life Alan Jackson, University of Southampton, Southampton, UK

Body composition measurement techniques in infants Kenneth Ellis, Baylor College of Medicine, Houston, USA

Standardization of body composition from birth to 2 years of age - an international initiative

Lena Davidsson, Kuwait Institute for Scientific Research, Kuwait Safat, Kuwait

Quality control issues related to body composition assessment Steve Wootton, University of Southampton, Southampton, UK

14.30-16.00

T5

Oral Communications

Chairs: Roxana Valdés, Valdés, Center for Research and Graduate Studies in Health Sciences (CIEACS), Faculty of Medicine, Autonomous University of Mexico D.F, Mexico Luis Gracia, Children's Health and Exercise Research Centre, College of Life and Environmental Sciences, Sport & Health Sciences, University of Exeter, Devon, UK

O098 - ZINC ABSORPTION FROM RICE IS SIMILAR WHEN ZINC IS INTRINSICALLY INCREASED THROUGH BIOFORTIFICATION OR EXTRINSICALLY ADDED AS ZNSO4

M. Brnic, Laboratory of Human Nutrition, Institute of Food, Nutrition and Health, ETH Zurich, Switzerland

0099 - SEX DIFFERENCES OF VITAMIN E METABOLISM IN RATS.

A. Takenaka, Department of Agricultural Biochemistry, School of Agriculture, Meiji University, Kawasaki, Kanagawa, Japan

O100 - IODINE EXCRETION HAS DECREASED IN DENMARK DURING THE LAST 5-6 YEARS

L B. Rasmussen, Division of Nutrition, National Food Institute, Technical University of Denmark

O101 - EVALUATION OF ZINC STATUS AND COMMUNITY PERCEPTIONS IN PAKISTAN: THE NATIONAL NUTRITION SURVEY 2011 S. Soofi, Department of Paediatrics & Child Health, Aga Khan University, Pakistan

O102 - DEFINING OBESITY USING BIOLOGICAL END POINT IN CHILDREN V P. Wickramasinghe, Department of Paediatrics, University of Colombo, Sri Lanka

O103 - RIBOFLAVIN STATUS IS INVERSELY ASSOCIATED WITH HOMOCYSTEINE AND DETERMINES THE EFFECT OF THE MTHFR 677C>T POLYMORPHISM ON HOMOCYSTEINE DURING PREGNANCY C.J. García-Minguillán, Area of Preventive Medicine and Public Health, Faculty of Medicine and Health Sciences, Universitat Rovira I Virgili, IISPV, Reus, Spain

O104 - AN INADEQUATE FRUIT AND VEGETABLE INTAKE HAS ONLY A SMALL EFFECT ON VITAMIN STATUS IN EUROPEAN ADOLESCENTS- THE HELENA STUDY

C. Breidenassel, Department of Nutrition and Food Science, University of Bonn, Bonn, Germany

O105 - CLASSIFICATION OF BODY MASS INDEX OF RURAL AND PERI-URBAN SCHOOL CHILDREN AND ADOLESCENTS IN NIGERIA USING TWO INTERNATIONAL STANDARDS

H. Ene-Obong, Department of Biochemistry (Nutrition Unit), University of Calabar, Calabar, Cross River State, Nigeria

16.00-16.30

Special Lecture

T5

Chair: Angel Gil, University of Granada, Granada, Spain

Developing suitable methods of nutritional status assessment, a continuous challenge

Ibrahim Elmadfa, University of Vienna, Austria

Room C

08.00 - 10.00

Parallel Symposium

PS2-14

Dietary reference values for DNA damage prevention

T6 -6.1

Chairs: Ibrahim Elmadfa, University of Vienna, Austria Michael Fenech, Preventative Health Flagship, Australia The concept and relevance of DRVs for DNA damage prevention Michael Fenech, Nutrigenomics and DNA Damage Diagnostics CSIRO, Preventative Health Flagship, Australia

Vitamins and DNA damage prevention

Ibrahim Elmadfa, University of Vienna, Vienna Austria

Minerals and DNA damage prevention

Lynn Ferguson, University of Auckland, Auckland, New Zealand

Phytonutrients and DNA damage prevention Andrew Collins, University of Oslo, Oslo, Norway

11.30 - 13.30

Parallel Symposium

PS2-22 T6 – 6.1 The role of nutrition in healthy ageing: Insight from the CHANCES Project

Chairs: Antonia Trichopoulou, University of Athens Medical School, Hellenic Health Foundation, Athens, Greece Gregorio Varela Moreiras, Universidad CEU San Pablo, Spain

Nutrition and osteoporotic fractures in the elderly: Insight from the CHANCES project

Vasiliki Benetou, University of Athens Medical School, Athens, Greece

Biomarkers and nutrition

Eugène HJM Jansen, National Institute for Public Health and the Environment, Bilthoven, The Netherlands

Association of height and telomere length in the CHANCES consortium Linda Broer, Erasmus University Medical Centre, Rotterdam, The Netherlands

25-hydroxyvitamin D levels and mortality José Manuel Ordóñez Mena, German Cancer Research Centre, Heidelberg, Germany

14.30-16.00

Oral Communications

T6

Chairs: Manuel Hernández, Head of the Biochemistry and Physiology Department, Institute of Nutrition and Food Hygiene, Havana, Cuba

> Maria del Puy Portillo, Department of Nutrition and Food Sciences, Universidad del País Vasco, Vitoria, Spain

O106 - FRUIT MACROANTIOXIDANTS, A NEW TYPE OF MAJOR PLANT FOOD CONSTITUENTS, SIGNIFICANTLY CONTRIBUTE TO THE INTAKE OF ANTIOXIDANTS IN THE DIET

J. Pérez-Jiménez, Dpt. Metabolism and Nutrition, Institute of Food Science, Technology and Nutrition (ICTAN-CSIC), Madrid, Spain

O107 - EFFECT OF A DIETARY SUPPLEMENT IN BODY COMPOSITION IN PERIMENOPAUSAL WOMEN

V. Calabria Torres, Universidad Autónoma De Madrid, Spain

O108 - EFFECTS OF SEAWEED-RESTRUCTURED PORK DIETS ENRICHED WITH CHOLESTEROL ON RAT LIVER HISTOLOGICAL PARAMETERS A R. Schultz Moreira, Departamento de Nutrición y Bromatología I (Nutrición); Facultad de Farmacia, Universidad Complutense de Madrid, Madrid, Spain

O109 - PRECLINICAL EVALUATION OF THE IMMUNOMODULATORY EFFECT OF LACTOBACILLUS PLANTARUM 3547 ON HUMAN MACROPHAGES AND OBESE WISTAR RATS.

M. Tabernero, Experimental Surgery Department, Hospital La Paz Health Research Institute, Madrid, Spain

O110 - LACTOBACILLUS REUTERI DSM 17938 AND LACTOBACILLUS CASEI CRL 431 MODESTLY INCREASE GROWTH, NOT IRON AND ZINC STATUS, AMONG INDONESIAN CHILDREN

R. Agustina, SEAMEO RECFON (Southeast Asian Ministers of Education Organization Regional Center For Food and Nutrition), University of Indonesia, Indonesia

O111 - CONSUMPTION OF A POLYPHENOL-RICH ORANGE JUICE IMPROVES ENDOTHELIAL BIOMARKERS IN OVERWEIGHT AND OBESE ADULTS.(BIONAOS STUDY)

O. Rangel, Department of Biochemistry and Molecular Biology II, Institute of Nutrition and Food Technology Jose Mataix , Biomedical Research Centre, University of Granada, Granada, Spain

O112 - TEMPE AND TOFU FLOUR MAY HAVE POSITIVE EFFECT ON COGNITIVE FUNCTION

A. Kridawati, Faculty of Health Sciences, University Of Respati Indonesia, Indonesia

O113 - EFFCET OF ADMINISTRATION OF CARNITINE ON THE CARDIAC AND ERYTHROPOIETIC FUNCTION OF CARNITINE DEFICIENT PATIENTS. *Y. Aoki, Institute of Medullasin, Florida, USA*

16.00-16.30

Special Lecture

T6

Chair: Mari Nieves García, Instituto Venezolano de Investigaciones Científicas (IVIC), Venezuela

Iron nutrition of infants - what is too little and what is too much? Bö Lönnerdal, University of California, Davis, USA

Machuca and Albéniz Rooms

08.00 - 10.00

Parallel Symposium

PS2-15

Linking food security and nutrition education to improve infant and young child feeding

T7 - 7.1

Chairs: Barbara Burlingame, FAO Rome

María Puy Portillo, Department of Nutrition and Food Sciences, Universidad del País Vasco, Vitoria, Spain Agriculture-nutrition linkages: potentials and limitations for improving young children's diets through local foods Ellen Muehlhoff, FAO, Rome

Experience and lessons from Trials of Improved Practices: Consultative research with caregivers

Theresa Jeremias, FAO, Rome

Scaling up food security and Nutrition Education: opportunities and constraints

Gina Kennedy, FAO, Rome

Challenges of Applied Nutrition Research

Michael Krawinkel/Irmgard Jordan, Institute of Nutritional Sciences,

Justus Liebig University, Germany

(Machuca) 11.30 – 13.30

Parallel Symposium

PS2-23A T7 - 7.6

China's nutrition transition: Implications of rapid social and economic change for non-communicable disease risk

Chairs: Barry M. Popkin, University of North Carolina Chapel Hill, NC, USA Zhai Fengying, Chinese Nutrition Society, FenghuaHaojing, Beijing, China

Introduction: The China Health and Nutrition Survey
Barry Popkin, University of North Carolina Chapel Hill, NC, USA

China in the 1950-1982 period—a period of scarcity, a very traditional lifestyle, and extensive undernutrition
Shufa Du, University of North Carolina, Chapel Hill, USA

The evolution of the Chinese die Fengying Zhai, Chinese Nutrition Society, FenghuaHaojing, Beijing, China

The physical activity transition in China: 1989 to 2011 Huijun Wang, Chinese Center for Disease Control and Prevention, Beijing, China

Obesity dynamics in Chinese children and adults Penny Gordon-Larsen, University of North Carolina, Chapell Hill, USA

The emergence of cardiometabolic disease risk in Chinese children and adults: Consequences of changing patterns of diet, physical activity, and obesity

Linda Adair, University of North Carolina, Chapel Hill, NC, USA

Synthesis and implications: China's nutrition transition in context of the changes across Asia, Africa, Latin America, and the Middle East Barry Popkin, University of North Carolina Chapel Hill, NC, USA

(Albéniz) 11.30 – 13.30h

PS2-23B T7 – 7.6

Parallel Symposium

A global partnership to improve nutrition medicine in Vietnam

The AFINS Partnership: An overview Carine Lenders, Boston University School of Medicine, USA Elizabeth Henry, Boston University School of Medicine, USA

Research in clinical nutrition Nguyen Thi Lam, National Institute of Nutrition, Hanoi, Vietnam Thomas Ziegler, Emory University, USA

Hospital-based initiatives to improve nutrition medicine Dinh Thi Kim Lien, Bach Mai Hospital, Hanoi, Vietnam Lorraine Young, Boston Medical Center, USA

Designing a dietician education program Huong Cong Chanh, Hanoi Medical University, Vietnam Roberta Durschlag, College of Health and Rehabilitation Sciences: Sargent College, Boston University, USA

Panel Discussion

Representatives from the Abbott Fund Institute for Nutrition Science (AFINS) Project, USA and Vietnam

14.30-16.00

Oral Communications

T7

Chairs: Jordi Salas-Salvadó, Rovira i Virgili University, CIBERobn, Spain Marcela González-Gross, Universidad Politécnica de Madrid, Madrid, Spain

O114 - SOCIAL REPRESENTATION OF OBESITY IN A RURAL COMMUNITY OF MEXICO

T. Ochoa, Health Department, Iberoamerican University, Mexico

O115 - MAJOR DIETARY PATTERNS OF IRANIAN WOMEN AND THEIR RELATION WITH ETHNICITY AND DURATION OF RESIDENCE IN THE CAPITAL CITY (TEHRAN).

A. Rezazadeh, Community Nutrition Department, Faculty of Nutrition and Food Technology, Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran

O116 - CONTRIBUTION OF SORGHUM TO ENERGY, IRON AND ZINC INTAKES OF MOTHERS AND PRESCHOOL CHILDREN IN RURAL BURKINA FASO

Y. Martin-Prevel, Institut de Recherche pour le Développement (IRD) - UMR204 Nutripass IRD,UM2,UM1, France

O117 - HYDRATION STATUS AND ITS RISK FACTORS AMONG INDONESIAN ADOLESCENTS AND ADULTS

H. Hardinsyah, Food and Nutrition Society of Indonesia; and Department of Community Nutrition, Bogor Agricultural University, Kampus IPB, Jl Raya Darmaga, Bogor, Indonesia

O118 - SODIUM AND NUTRIENT DENSITY OF SOME TRADITIONAL DISHES AS CONSUMED IN NIGERIAN URBAN POPULATION IN RELATION TO CARDIOVASCULAR DISEASE (CVD)

E A. Udenta, University Of Nigeria, Nsukka, Nigeria

O119 - IDENTIFICATION OF TRADITIONAL FOOD RESOURCES AND THEIR IMPORTANCE IN A RURAL FARMING COMMUNITY IN SOUTHWESTERN NIGERIA

S I. Ejoh, Department of Human Nutrition, Faculty of Public Health, College of Medicine, University of Ibadan

O120 - ECONOMIC INEQUALITY AND OBESITY: MULTILEVEL ANALYSIS OF INDONESIAN COMMUNITIES

K. Sari, The Center for Public Health Intervention Technology, The National Institute of Health Research and Development, Indonesian Ministry of Health, Central Jakarta, Indonesia

O121 - INADEQUATE ENERGY AND PROTEIN INTAKES HAVE CONTRIBUTED TO THE HIGH PREVALENCE OF STUNTING IN INDONESIAN YOUNG CHILDREN

H. Hadi, Department of Public Health, Faculty of Medicine, University of Gadjah Mada, Jl. Farmako, Sekip Utara, Yogyakarta , Indonesia

16.00-16.30

Special Lecture

T7

Chair: Rekia Belahsen, Chouaib Douikkali University, El Jadida, Morocco

What would it take to ensure optimal growth among children in Africa Anna Lartey, University of Ghana, Legon, Ghana

Room D

08.00 - 10.00

Parallel Symposium

PS2-16

IUNS Task Force

T8 - 8.2

Food composition (FAO)

Chairs: Ruth Charrondiere, FAO, Rome, Italy
Suzanne Murphy, University of Hawaii, USA

Impact of food composition data on nutrient intakes, requirement, programmes and policies

Suzanne Murphy, University of Hawaii, USA

The role of food composition data for nutrition labelling Janice Albert, FAO, Rome, Italy

The correct use of food composition data

Deborah Bastos, São Paulo University, São Paulo, Brazil

The need of new high-quality analytical data on food composition in general and specifically for biodiversity and wild and underutilized foods

T. Longvah, Head Food Chemistry Division, India

Link between food composition, nutrition, agriculture and better food supply to combat malnutrition through food-based approaches *Ruth Charrondiere, FAO, Rome, Italy*

11.30 - 13.30

Parallel Symposium

PS2-24 T8 - 8.2 Sugars and health – the controversies continue (EUFIC)

Chairs: Mike Gibney, University College Dublin, Dublin, Ireland
Wim H.M. Saris, Maastricht University and Corporate scientist
Human Nutrition, DSM Inc. The Netherlands

Sweetness, hedonic impact and food intake Graham Finlayson, Institute of Psychological Sciences, University of Leeds, Leeds, UK

Effects of sugars on metabolic health Luc Tappy, University of Lausanne, Switzerland

Sugars to deal with fatigue during exhausting endurance performance Fred Brouns, Maastricht University, The Netherlands

14.30-16.00

Oral Communications

T8

Chairs: Godwin Ndossi, Tanzania National Health Research Forum, Tanzania Begoña Olmedilla, Instituto de Ciencia y Tecnología de Alimentos y Nutrición (ICTAN) - Consejo Superior de Investigaciones Científicas (CSIC)

O122 - CONFLICTING INDICATORS OF FOOD INSECURITY FROM A PILOT STUDY OF WATER, SANITATION, HYGIENE AND NUTRITION INTERVENTIONS IN RURAL WESTERN KENYA

A. Williams, Program in International and Community Nutrition, University of California, Davis, CA, USA

O123 - AVAILABILITY OF NUTRITION SERVICES IN MATERNAL, NEONATAL AND CHILD HEALTH (MNCH) FACILITIES IN BANGLADESH M. Mridha, International Center for Diarrheal Disease Research, Bangladesh

O124 - COMBATING VITAMIN A DEFICIENCY DISEASES: BUILDING THE EVIDENCE BASE AND PARTNERSHIPS FOR FOOD BASED APPROACHES J. Low, Regional Office for Sub-Saharan Africa, International Potato Center, Nairobi, Kenya

O125 - DELIVERY OF MICRONUTRIENT POWDER SACHETS THROUGH SALES BY FRONTLINE HEALTH WORKERS ENABLES HIGH REACH, BUT HOUSEHOLD POVERTY CONSTRAINS UPTAKE

R. Rawat, International Food Policy Research Institute (IFPRI), Washington, DC, USA

O126 - UPDATED NUTRIENT DATA ON DANISH BEEF AND VEAL U. Kehlet, Danish Meat Research Institute, Denmark

O127 - CHARACTERIZATION OF OATS SAFETY IN CELIAC DISEASE IN RELATION TO THE CULTIVAR

M. Silano, Unit of Human Nutrition and Health, Istituto Superiore Di Sanità, Rome, Italy

O128 - HOUSEHOLD WATER ACCESS AND SANITATION AS INDICATORS OF VITAMIN A AND ZINC EFFICACY ON GUT PARASITE RESOLUTION K. Long, School of Population Health, University of Queensland, Australia

O129 - DETERMINATION OF TOTAL PHENOLICS, ANTHOCYANINS AND ANTIOXIDANT ACTIVITY OF AN ALGERIAN DATE FRUIT VARIETY (DEGLET –NOUR)

Z. Kheira, Department of Biology, Benific microorganisms, functional food and health laboratory (BMFFHL), University of Mostaganem University

16.00-16.30

Special Lecture

T8

Chair: Stefaan de Henaw, Stefaan De Henauw, Ghent University, Ghent, Belgium

Sustainable diets: how nutrition can save the planet *Barbara Burlingame, Food and Nutrition Division, FAO, Rome*

Wednesday, September 18th

Andalucía Rooms

08.00 - 10.00

Parallel Symposium

PS3-25 T1 -1.1 New biomarkers for health claims made on food (BIOCLAIMS)

Chairs: Aldona Dembinska-Kiec, The Jagiellonian University Medical College (JUMC), Krakow, Poland Lluís Arola, CTNS, Universitat Rovira I Virgili, Tarragona, Spain

Biomarkers of benefit for health claims made on food: This is the challenge

Andreu Palou, Universidad de las Islas Baleares & CIBERobn (Ciber De Fisiopatología de la Obesidad y Nutrición), Spain

Biomarkers of healthy phenotype Ben Van Omen, TNO Quality of Life (TNO), Zeist, The Netherlands

Stress challenges as tools for biomarker identification Jaap Keijer, Wagenningen Univ, The Netherlands

Peripheral blood cells as source of biomarkers Paula Oliver / Catalina Picó, University of the Balearic Islands, Spain

Reading the patterns of endogenous damage to the proteins (Proteomics of damage)

Paul Thornaley/ NailaRabani, University of Warwick (UWA), Coventry, UK

The carnitine family as biomarkers of metabolic health in the intervention studies using omega 3 and thiazolidinediones

Jan Kopecky, Institute of Physiology, Academy of Sciences of the Czech

Republic (ASCS), Prague, Czech Republic

The challenge of validating biomarkers in humans: the Bioclaims approach

Brigitte M. Winklhofer-Roob, Karl-Franzens University of Graz, Austria, and Johannes M. Roob, Medical University of Graz, Austria,

Biomarkers of inflammation: relationship with nutrition and with health outcomes

Philip C. Calder, University of Southampton (USoton), UK

11.30 - 13.30

Parallel Symposium

IUNS Task Force

PS3-33

T1 - 1.4

OMICS technologies with nutritional perspectives

Chairs: Ben van Ommen, TNO, Zeist, The Netherlands José Alfredo Martinez, Universidad de Navarra, Spain

Nutrigenetics & nutrigenomics: The scope of a new discipline Raffaele De Caterina, ISNN

Nutriepigenomics and obesity

José Alfredo Martinez, Universidad de Navarra, Spain

Metabolomics and nutritional applications

Lorraine Brennan, UCD Institute of Food and Health, UCD Dublin,

Ireland

Network biology and systems biology applications in nutrition *Marijana Radonjic, TNO, Zeist, The Netherlands*

14.30 - 16.30

Debate

T1

Time to introducing complementary foods into the infant diet" Chair: Bert Koletzko, University of Munich, Germany

Complementary foods should be introduced from the 7th month onwards

Anna Lartey, University of Ghana, Legon, Ghana, West Africa

Complementary foods should be introduced from the 5th month onwards

Mary Fewtrell, University College London, UK

16.00 - 16.30

Special Lecture

T1

Chair: Reynaldo Martorell, Emory University, Atlanta, USA

Early Nutrition and non-nommunicable diseases in countries of the Middle-East

Nahla Houalla, Dean of the Faculty of Agriculture, American University of Beirut, Lebanon, Beirut

Machado and Picasso Rooms

08.00 - 10.00

Parallel Symposium

PS3-26

T2 - 2.2

Scaling up nutrition to improve infant and young child feeding (IYCF) (Alive & Thrive)

Chairs: Ellen Piwoz, Bill & Melinda Gates Foundation, Washington, DC, USA

Cristina Campoy, University of Granada, Spain

Factors contributing to dramatic increases in exclusive breastfeeding in Bangladesh

Tina G. Sanghvi, Alive & Thrive, FHI 360, Bangladesh

Motivating frontline workers to deliver improved infant and young child nutrition services: A cross-country perspective Purnima Menon, International Food Policy Research Institute, New Delhi, India

Alternatives to randomized control designs: Evaluation of a mass media campaign where television is universal, lessons from Vietnam Silvia Alayón, Alive & Thrive, Save the Children, Washington, DC, USA

Evidence linking handwashing to improved child feeding outcomes Leanne Unicomb, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh

(Machado) 11:30-13:30

Parallel Symposium

PS3-34A T2 - 2.5

Nutrients and exercise performance – What is the evidence behind recent claims of major benefits?

Chairs: Ian A. Macdonald, University of Nottingham, UK Francis Stephens, University of Nottingham, UK

Distinct roles for the effects of L-carnitine supplementation on exercise performance and reducing body fat Francis Stephens, University of Nottingham, UK

Does protein supplementation increase muscle mass and strength? Luc van Loon, University of Maastricht, The Netherlands

Mechanisms behind the effects of dietary nitrate supplementation on performance

Jon Lundberg, Karolinska Instituet, Sweden

Is there a role for antioxidants in improving exercise performance? Jose Calbet, University of Las Palmas de Gran Canaria, Spain

(Picasso) 11.30 – 13.30

PS3-34B

T2 - 2.2

Parallel Symposium

Past and current experiences in leveraging multiple program and partner platforms to scale-up nutrition interventions (The SPRING project)

Chair: Jessica Tilahun, Nutrition Advisor, United States Agency for International Development (USAID), Washintong, USA

Learning from past successes in scaling up integrated nutrition programs to inform future efforts: design and delivery considerations Christian Winger, USAID's Strengthening Partnerships, Innovation, and Results in Nutrition Globally (SPRING), USA

Using lessons learned from earlier nutrition efforts in Nepal to design a multi-platform national scale integrated nutrition project *Pooja Pandey Rana, HKI Program Implementation, Nepal*

Scaling-up nutrition using synergy between health and agriculture platforms Bangladesh.

Yasir Arafat, The SPRING/Bangladesh Project, USA

Building capacity across multiple systems to enhance nutrition outcomes: The ENGINE Project's approach to capacity building in Ethiopia.

Habtamu Fekadu, USAID's ENGINE Project, Ethiopia

T2

The best dietary approach to achieve weight loss and weight maintenance

Chair: Dick Atkinson

Role of Protein and Glycaemic Index

Arne Astrup, University of Copenhagen, Denmark

Role of Intermittent Fasting/Low energy diet combined with normal eating

Alex Johnstone, University of Aberdeen, UK

16.00 - 16.30

T2

Special Lecture

Chair: Mauro Fisberg, Department of Pediatrics, Escola Paulista de Medicina, Federal University of Sao Paulo, UNIFESP, Brazil

Genetic engineering/biotechnology and it's relevance to pediatric nutrition

Ronald E. Kleinman, Mass General Hospital for Children Chair, Department of Pediatrics Massachusetts General Hospital Charles Wilder Professor of Pediatrics Harvard Medical School

Falla Auditorium

08.00 - 10.00

Parallel Symposium

PS3-27 T3 - 3.6 Community-based programme to prevent obesity: Lessons and perspectives from 20 years of experience (EPODE International Network)

Chairs: Gregorio Varela, University CEU San Pablo, Madrid, Spain Susan JEBB, Medical Research Council Human Nutrition unit (HNR), Cambridge, United Kingdom

Effect of vitamin B12 and n-3 polyunsaturated fatty acids on plasma homocysteine, and other cardiovascular risk factors: A randomized controlled trial

Terry Huang, University of Nebraska Medical Center College of Public Health, Nebraska, USA

How would be defined a Community-Based Programme in 2013? Boyd Swinburn, The University of Auckland, Auckland, New Zealand

What would be the evaluation framework of a Community-Based Programme in 2013?

Jaap Seidell, VU University of Amsterdam, Amsterdam, The Netherlands

Community-based programmes to prevent obesity

Jean-Michel Borys, EPODE International Network, Brussels, Belgium

Epode International Network: the world's largest obesity prevention network

Armando Barriguette, EPODE International Network, Brussels, Belgium

11.30 - 13.30

PS3-35 T3 – 3.6

Parallel Symposium

Promoting healthy growth and preventing childhood stunting (WHO)

Chair: Francesco Branca, World Health Organization, Geneva, Switzerland

Promoting healthy growth and preventing childhood stunting – a WHO initiative

Adelheid Onyango, World Health Organization, Geneva, Switzerland

Promising interventions and research areas in complementary feeding and healthy growth promotion

Kim Michaelsen, University of Copenhagen, Denmark

Monitoring Child Growth and Infant and Young Child Feeding practices Mercedes de Onis, World Health Organization, Geneva, Switzerland

14.30 - 16.30

T3

Panel discussion

Dietary sugars: controversies on relevant scientific findings and health implications

Chairs: Benjamin Caballero, International Health, Johns Hopkins Bloombergs School of Public Heatlh Baltimore, USA Luis Moreno, University of Zaragoza, Zaragoza, Spain

Epidemiology of sweetener use and their health effects
Frank Hu, Harvard Medical School and Channing Lab, BWH, USA

Effects of fructose on cardiometabolic risk factors.

John Sievenpiper, Clinical Nutrition and Risk Factor Modification Centre,
St. Michael's Hospital, Toronto, Canada

Sugar sweetened beverages Consumption and body weight David Allison, Nutrition & Obesity Research Center, University of Alabama at Birmingham

Lorca Auditorium

08.00 - 10.00

PS3-28 T4 – 4.1

Parallel Symposium

Role of dietary macronutrients on weight management. Role of protein and glycemic index in body weight regulation – Lessons from the Diogenes intervention study

Chairs: Arne Astrup, University of Copenhagen, Denmark
Wim Saris, Maastrich University Medical Center, The
Netherlands

The use of an ad libitum higher-protein, low-glycemic index diet in overweight children: the Diogenes Study
Arne Astrup, Department of Nutrition, Exercise and Sports (NEXS), Faculty of Science, University of Copenhagen

Benefits and mechanism of moderately high protein and high fiber diets in body weight loss and maintenance

José Alfredo Martinez, Universidad de Navarra, Spain

Comparison of intervention and COHORT study of dietary protein in body weight regulartion reconciling opposing evidence Mikkel Zöllner Ankarfeld, Institute of Preventive Medicine, Frederiksderg, Denmark

Can we predict weight loss and maintenance success using the genomics/metabolomics technologies: The Diogenes study Wim H.M. Saris, Maastrich University Medical Center, The Netherlands

10.30 - 11.30 Plenary Lecture

Chair: Andreu Palou, Universidad de las Islas Baleares & CIBERobn (Ciber De Fisiopatología de la Obesidad y Nutrición), Spain

New powers of brown fat: fighting the metabolic syndrome

Jan Nedergaard, The Wenner-Gren Institute, Stockholm University,

Stockholm, Sweden

11.30 – 13.30 Parallel Symposium

PS3-36 T4 – 4.1 ISCOLE: International Study of Childhood Obesity, Lifestyle and the Environment

Chairs: Peter T. Katzmarzyk, Pennington Biomedical Research Center, Baton Rouge, USA Amelia Marti, Universidad de Navarra, Spain

Introduction and background, rationale and study design of ISCOLE Peter T. Katzmarzyk, Pennington Biomedical Research Center, Baton Rouge, USA

ISCOLE – Portugal: Preliminary data analysis linking weight status and the environment

José Maia, Faculdade de Desporto University of Porto, Porto, Portugal

The international study of childhood obesity, lifestyle and the environment: Preliminary results from Kenya Vincent Onywera, Kenyatta University, Nairobi, Kenya

International study of childhood obesity, lifestyle and the environment (ISCOLE): methods and preliminary results from colombia Olga L. Sarmiento, Universidad de los Andes, Bogota, Colombia

Discussion and facilitated question period

14.30 – 16.30 IUNS Living Legends and Nevin Scrimshaw Tribute Session

Chairs: Ibrahim Elmadfa, University of Vienna, Austria Irvin Rosenberg

A personal view of Nutrition in Spain Salvador Zamora, Emeritus Professor, University of Murcia, Spain

A personal view of the nutrition situation in Europe

Claus Leitzman, Emeritus Professor Institute for the Science of Nutrition, Justus-Liebig-Universität of Giessen

Audiovisual presentation of selected Nutrition living legends from IUNS adhering bodies

Nevin Scrimshaw legacy to the science community Irvin Rosenberg, Nevin Scrimshaw International Nutrition Foundation, Boston

Room B

08.00 - 10.00 PS3-29 T5 - 5.4

Parallel Symposium

Vitamin A supplementation for children 6-59 months of age: revisiting program strategies and priorities

Chairs: Shawn K. Baker, Vice President and Regional Director for Africa,
Helen Keller International, Dakar-Yoff, Senegal
Begoña Olmedilla, Instituto de Ciencia y Tecnología de
Alimentos y Nutrición (ICTAN) - Consejo Superior de
Investigaciones Científicas (CSIC)

Introduction: Continuing relevance of VAS and contributions to reducing U5M

Shawn K. Baker, Vice President and Regional Director for Africa, Helen Keller International, Dakar-Yoff, Senegal

Vitamin A Supplementation Programs – Revisiting the Strategy: Current priorities of global VAS strategies including building national ownership.

Nita Krakania, UNICEF, New York, NY, USA

Program Implementation examples:

Monitoring for equity: Use of monitoring data and post event assessments to inform programme strategy and ensure equity: Jessica Blankenship, Helen Keller International - Sub-Regional Office for East and Southern Africa, ILRI Campus, Uthiru, Nairobi, Kenya

Delivering vitamin A supplementation at 6-months of age: An opportunity to improve child survival Roland Kupta, Nutrition Unit, Child Survival and Development Section, UNICEF Regional Office for West and Central Africa Dakar, Senegal

Mobilizing religious leadership to increase coverage of VAS in Tanzania

Temina Mkumbwa, Nutrition Program Officer, Helen Keller International , Helen Keller International Tanzania, Dar es Salaam United Republic of Tanzania Integration of VAS into the Health System

Alison Greig, Senior Technical Advisor - Child Survival,

Micronutrient Initiative, Ottawa, Ontario, Canada

Evidence base to inform countries when phase-out of VAS may be appropriate

Lynette Neufeld, Micronutrient Initiative, Ottawa, Ontario, Canada

11.30 – 13.30 PS3-37 T5 – 5.4

Parallel Symposium

Findings from 5 birth cohorts from developing countries: The COHORTS collaboration

Chairs: Linda Richter, South Africa

Mari Nieves Garcia, Instituto Venezolano de Investigaciones

Científicas (IVIC), Venezuela

History of the COHORTS collaboration and methodological considerations

Caroline Fall, University of Southampton, UK

Growth from birth to adulthood in five low- and middle-income countries – COHORTS

Aryeh Stein, Emory University, Atlanta GA, USA

Intergenerational effects on growth
Reynaldo Martorell, Emory University, Atlanta, USA

Long term effects of linear growth vs. weight gain on adult human capital and health

Linda Adair, University of North Carolina at Chapel Hill, USA

Lessons learned from COHORTS and the post 2015 Global Agenda Cesar Victora, Federal University of Pelotas, Brazil Reynaldo Martorell (presenting), Emory University, Atlanta, USA

14.30 - 16.30

Debate

T5

Vegetarians versus non-vegetarian diets: Are they able to ensure an adequate nutritional status

Chair: Gregorio Varela, University CEU San Pablo, Madrid, Spain

Are vegetarian diets healthy?

Joan Sabate, Loma Linda University, California, USA

16.00-16.30

Special Lecture

T5

Chair: Ángel Gil, University of Granada, Granada, Spain

Regulation of protein synthesis in skeletal muscle by leucine during the neonatal period

Teresa Davis, Baylor College of Medicine, U.S. Department of Agriculture / Agricultural Research Service , Children's Nutrition Research Center at Baylor College of Medicine

Room C

08.00 - 10.00

Parallel Symposium

PS3-30

Fibres and the gut immune system (FIBEBIOTICS Project)

T6 - 6.1

Chairs: Jurriaan Mes, FBR-WUR, The Netherlands
Fermin Sanchez de Medina, Department of Pharmacology,
University of Granada, Granada, Spain

Fibres and the gut immune system (EU Fibebiotics Project)

Jurriaan Mes, FBR-WUR, The Netherlands

Determination of beta-glucans in food and samples from in vitro systems

Svein Knutsen, NOFIMA, Norway

Development of integrated in vitro gut model platforms to study fiber fermentation and gut immune effects

Sam Possemiers, Prodigest, Belgium

Microbial Exopolysaccharide production and Functional Food Applications Catherine Stanton, Teagasc, Ireland

11.30 - 13.30

Parallel Symposium

PS3-38

T6 - 6.2

HEALTHGRAIN Forum Symposium - Cereal foods and health - New results and science based nutrition guidelines

Chairs: Kaisa Poutanen, University of Eastern, Finland Gabriele Riccardi, Federico II University, Naples, Italy

General introduction – cereal foods and components in our daily diets and their importance for health

Gabriele Riccardi, Federico II University, Naples, Italy

Whole grain and fibre intake and colorectal cancer; new results from the HELGA and EPIC cohorts

Anja Olsen, Institute of Cancer Epidemiology, Danish Cancer Society Research Centre, Copenhagen, Denmark

Health benefits of whole grain wheat: intervention study clarifying underlying mechanisms and the role of polyphenols bound to dietary fibre

Paola Vitaglione, Department of Agricultural and Food Science, University of Naples, Naples, Italy

Whole grain wheat intake – impact on weight loss, body composition and cardiometabolic factors – results from intervention studies Penny M. Kris-Etherton, Department of Nutritional Sciences, The Pennsylvania State University, USA Global dietary whole grain recommendations: a harmonised or multifarious message?

Chris Seal, Newcastle University, Newcastle upon Tyne, UK

Concluding remarks followed by plenary discussion Kaisa Poutanen, VTT and University of Eastern Finland, Finland

16.00-16.30

Special Lecture

T6

Chair: Francisco Pérez- Jiménez, Professor of Internal Medicine, Scientific Director of IMIBIC, University of Cordoba, Spain

Why alpha-linolenic acid (ALA) is essential: New research on plant based sources

Kris Etherton, Department of Nutritional Sciences, The Pennsylvania State University, USA

Machuca and Albéniz Room

(Machuca) 08.00 - 10.00h

Parallel Symposium

PS3-31A T7 -7.3 Building research capacity in Latin America to address NCDs and obesity

Chairs: Michael Pratt, Emory University, Atlanta, USA Eduardo Atalah Samur, University of Chile, Chile

The challenge of building nutrition research capacity in Ibero-America: The FINUT experience

Angel Gil, University of Granada, Granada, Spain

Leveraging partnerships and networks to create courses, joint projects and academic exchanges for increasing physical activity research capacity in the Americas

Michael Pratt, Emory University, Atlanta, USA

Identifying and closing a gap: Physical activity and nutrition behavior change research

Olga Lucia Sarmiento and Silvia Gonzalez, los Andes University, Bogotá, Colombia

Creating a center of excellence for NCD research in Latin America Jaime Miranda, Universidad Peruana Cayetano Heredia, Perú

(Albéniz) 08.00 – 10.00

Parallel Symposium

PS3-31B

IUNS Task Force

T7 - 7.6

Traditional, indigenous and cultural food and nutrition

Chairs: Harriet V. Kuhnlein, McGill University, Montreal, Canada Rekia Belahsen, Chouaib Douikkali University, El Jadida, Morocco

Traditional Mediterranean diet with North African perspective Rekia Belahsen, Chouaib Douikkali University, El Jadida, Morocco Resilience to the compounding effects of climate change on the nutrition transitions experienced by the Yellowknives Dene First Nation Chief Bill Erasmus, Dene Nation and Assembly of First Nations, Yellowknife, Canada and Gail Harrison, University of California at Los Angeles, Los Angeles, USA

From micro to macro policies: why micro-level differences matter in the fight to preserve access to traditional, indigenous foods Gretel H. Pelto, Cornell University, Ithaca, USA

Biodiversity, food systems and nutritional status of the Indigenous People of Northeast India

T. Longvah, National Institute of Nutrition, Hyderabad, India

Traditional cultivation and use of maguey and cactus pear in the Upper Mezquital Valley of Mexico: Relevance for sustainable livelihoods María Daniela Núñez Burbano de Lara, University of Hohenheim, Germany

(Machuca) 11.30 - 13.30

PS3-39A

T7 - 7.6

Parallel Symposium

ENLP - Nutrition during times of economic crisis, let's cook something up!

Chairs: Roosmarijn Verstraeten, Ghent University, Ghent, Belgium Christophe Matthys, Leuven, Belgium

A challenge for public health nutrition in a time of austerity Martin Caraher, Centre for Food Policy at City University, London, UK

Nutrition (How do we ensure nutritious foods?) During the economic

Karl Raats, Speaker, trainer and facilitator in applied creative thinking, Belgium

(Albéniz) 11.30 - 13.30

Parallel Symposium

PS3-39B

IUNS Task Force

T7 - 7.6

Capacity development in innovative techniques in food and nutrition research

Chairs: Ibrahim Elmadfa, University of Vienna, Vienna, Austria Angel Gil, University of Granada, Granda, Spain

Diet quality, determinants and methods of assessment Ibrahim Elmadfa, University of Vienna, Austria

Gut microbiota, tools for analyzing immune functions Angel Gil, University of Granada, Granada, Spain

Metrology based measurements in food and nutrition sciences V. Iyengar, Washington, USA

Isotope technique tools for better accuracy of analytical procedures Anura V Kurpad, St John's Medical College, Bangalore, India

Building research capacity in nutrition in the Middle East and North Sfrica: The challenge for MENANA

Sidiga Washi, United Arab Emirates University, UAE

16.00-16.30

Special Lecture

T7

Chair: Furio Brighenti

Bioactive foods and ingredients for health

Connie Weaver, Department of Nutrition Science (NUTR), Purdue University, USA

Room D

08.00 - 10.00

Parallel Symposium

PS3-32 T8 – 8.3 Low-calorie sweeteners: Are they safe and can they help with weight management?

Chairs: Tommy Vischer, Windesheim University of Applied Sciences, The Netherlands Arturo Anadon, Complutense University of Madrid, Spain

Why did we evolve a taste for sweetness and can we live without it? Marion Hetherington, Professor of Biopsychology Institute of Psychological Sciences University of Leeds, Leeds, UK

Dietary habits and the use of LCS: An effective tool in the prevention of obesity and diabetes

Adam Drewnowski, University of Washington, Seattle, Washington, USA

Low calorie sweeteners: Should the public be concerned still? Andrew Renwick, University of Southampton, UK

11.30 - 13.30

Parallel Symposium

FESNAD forum: Nutrition claims*

PS3-40 T8 - 8.3

> Chairs: Rosaura Farré Rovira, Retired, University of Valencia, Spain Jordi Salas-Salvadó, Rovira i Virgili University, CIBERobn, Spain

Nutrition and Health Claims: Different Aspects Rosaura Farré Rovira, Retired, University of Valencia, Spain

How important are health claims in infant nutrition? José Manuel Moreno Villares, Hospital Universitario 12 de Octubre, Madrid, Spain

Claims related to functional foods in the cardiovascular area Jordi Salas-Salvadó, Rovira i Virgili University, CIBERobn, Spain Communication on food and nutrition in hospital Olga Ruiz Guerrero, Hospital Virgen de la Victoria in Malaga, Málaga, Spain

Health claims. More severe than the European Food Safety Authority (EFSA): To be or not to be?

Eduard Baladía, Spanish Foundation of Dietitians & Nutritionists,

Pamplona, Spain

Health claims in meat based functional foods Francisco Jiménez- Colmenero, CSIC, Madrid, Spain

Introduction of functional foods in the diet of school canteen. Towards a nutritional fortification of our students

Manuel Espinoza Montenegro, Latin American School Feeding Network

*This session will be in Spanish, no translation will be provided.

16.00 - 16.30

Special Lecture

T8

Chair: Lluis Serra-Majem, Universidad de Las Palmas de Gran Canaria, Spain

Agrinutrition. Where are we going?

Alan Dangour, The Leverhulme Centre for Integrative Research in Agriculture and Health

Thursday, September 19th

Andalucía Rooms

08.00 - 10.00

Parallel Symposium

PS4-41 T1 – 1.1 Public health genomics in individualized nutrition

Chairs: Fermin Milagro, Department of Nutrition, Food Science and Physiology, University of Navarra, Pamplona, Spain Helmut Brand Department of International Health, Maastricht University, The Netherlands

Public health genomics in nutritional sciences

Angela Brand, Maastricht University, Maastricht, The Netherlands

Epigenetic mechanisms of bioactive food components in cancer prevention

Barbara Stefanska, McGill University, Montreal, Quebec, Canada

Integration of genetic and epigenetic information in cancer Nuria Malats, Spanish National Cancer Research Centre (CNIO), Madrid, Spain

Let's implement public health genomics and personalized nutrition Ben van Ommen, TNO, Zeist, The Netherlands

Genetic, epigenetic and nutritional interactions in neurological

Borut Peterlin, University Medical Center Ljubljana

Genomics, microbiomics and epigenomics in metabolic syndrome, a case study in Public Health Genomics

Alexander G. Haslberger, University of Vienna, Austria

11.30 - 13.30

Parallel Symposium

PS4-49 T1 – 1.4 Biomarkers of response to dietary interventions

Chairs: Philip C. Calder, University of Southampton, Southampton, UK Ricardo Rueda, Abbot Laboratories, Spain

Advanced imaging techniques to study brain development in nutritional interventions

Stéphane V. Sizonenko, Children's Hospital, Department of Child and Adolescent Medicine, Geneva, Switzerland

Applying structural magnetic resonance brain imaging in nutrition studies

Kristine B. Walhovd, University of Oslo, Oslo, Norway

A consideration of biomarkers to be used for evaluation of inflammation in human nutritional studies

Philip C. Calder, University of Southampton, Southampton, UK

New metabolomic strategies in clinical nutrition research: from diet to revealing disease risk biomarkers

Cristina Andrés-Lacueva, University of Barcelona, Barcelona, Spain

14.30-16.00

Oral Communications

Ukraine

T1

Chair: Jose Luis Santos, Pontificia Universidad Católica de Chile, Santiago, Chile Concepcion Aquilera, University of Granada, Granada, Spain

O130 - LONG-TERM HEALTH CONSEQUENCES OF EARLY-LIFE STARVATION: EVIDENCE FROM FAMINE-BORN COHORTS IN UKRAINE A. Vaiserman, Laboratory of Epigenetics, Institute of Gerontology, Kiev,

O132 - CHANGES IN IRON METABOLISM, HAEMATOLOGICAL AND INFLAMMATORY PARAMETERS OF DIABETIC RATS TREATED WITH VANADIUM AS AN ANTIDIABETIC AGENT

C. Lopez-Chaves, Department of Physiology, University of Granada, Granada, Spain

O133 - PUFA AND OXIDATIVE STRESS. FROM CYTOTOXIC EFFECT TOWARD ANTIOXIDANT DEFENCES

M. Di Nunzio, Interdepartmental Centre for Industrial Agri-Food Research, University of Bologna, Cesena, Italy

O134 - DIETARY COFFEE POLYPHENOLS DON'T ATTENUATE FEATURES OF THE METABOLIC SYNDROME AND ENDOTHELIAL DYSFUNCTION IN MICE FED A HIGH-FAT DIET

N. Ward, School of Medicine & Pharmacology, University Of Western Australia, Perth, WA, Australia

O135 - THE INFLUENCE OF BLOOD SELENIUM STATUS AND SELENOPROTEIN GENE VARIATION ON COLORECTAL CANCER RISK D. Hughes, Department of Physiology & Medical Physics & Centre for Systems Medicine, Royal College of Surgeons in Ireland, Dublin, Ireland

O136 - RELATIONSHIP BETWEEN METHIONINE METABOLISM PATHWAY GENES WITH PLASMA HOMOCYSTEINE AND RISK OF TYPE 2 DIABETES IN CHINESE

T. Huang, Zhejiang University, Hangzhou, China

O137 - IMPACT OF BREAST-FEEDING COMPARED TO FORMULA-FEEDING ON BLOOD-CELL TRANSCRIPT-BASED POTENTIAL BIOMARKERS OF HEALTH IN CHILDREN

J. Sánchez, Laboratory of Molecular Biology, Nutrition and Biotechnology (Nutrigenomics), University of the Balearic Islands (UIB) and CIBER Fisiopatología de la Obesidad y Nutrición (CIBERobn), Palma de Mallorca, Spain

Brite versus brown and white adipose tissues: functional and molecular differences

Barbara Cannon, Stockholm University, Sweden

Machado and Picasso Rooms

(Machado) 08.00 - 10.00

PS4-42A T2 - 2.5

Complementary feeding and infant health (FAO Project)

Chairs: Anna Lartey, University of Ghana, Legon, Ghana, West Africa Michael Krawinkel, Justus-Liebig-University Giessen, Germany

Benefits of longer breastfeeding

Michael B. Krawinkel, Justus-Liebig-University Giessen, Germany

Introduction of solids and semisolids – critical nutrient and energy density

Anna Lartey, University of Ghana, Legon, Ghana, West Africa

Nutrition education and infant feeding Ellen A. Muehlhoff, Nutrition Education and Consumer Awareness Group, Nutrition Division (ESN), FAO, Rome, Italy

Health risks associated with infant feeding practices Irmgard Jordan, Justus-Liebig-University, Giessen, Germany

Closing

Michael B. Krawinkel, Justus Liebiq University Giessen, Germany

(Picasso) 08.00 - 10.00

PS4-42B T2 - 2.5

Parallel Symposium

Generating evidence of impact for integrated programs aimed to improve child nutrition during the first 1000 days (IFPRI)

Chairs: Marie Ruel, International Food Policy Research Institute, USA

Reynaldo Martorell, Emory University, Atlanta, USA

The evaluation of Tubaramure in Burundi: An integrated food aid program

Jef Leroy, International Food Policy Research Institute, USA

Using program impact pathways (PIPs) to trace early impact in the Alive & Thrive program in Bangladesh Rahul Rawat, International Food Policy Research Institute, USA

The use of process evaluation to improve program implementation and potential impact on children's nutrition; evidence from HKI's homestead food production program in Burkina Faso Deanna Olney, International Food Policy Research Institute, USA

Data for delivery S K. Baker, Helen Keller International, New York, USA

Adding value to evaluation: answering "why" and "how" along with "did or didn't"

James Garrett, International Food Policy Research Institute, USA

11.30 - 13.30

PS4-50 T2 - 2.2 **Parallel Symposium**

Early diet is critical for later development - New research into changing early eating habits (HABEAT and VIVA)

Chairs: Sylvie Issanchou, INRA – CSGA, Dijon, France Elvira Larque, University of Murcia, Spain

Critical periods for eating habit development; results from cohort studies in France, Portugal, Greece and UK Pauline Emmett, University of Bristol, UK

Learning to like vegetables: Applying learning theory to the acquisition of preferences for novel vegetables from 6 – 36m Marion Hetherington, University of Leeds, UK

Results of the taste study: an intervention to increase vegetable liking and consumption by exposure to a variety of vegetables at weaning *George Moschonis, University of Harokopio, Greece*

Strategies to increase vegetable consumption in 3- to 6-years-olds: theory and practice

Gertrude Zeinstra, DLO-Food & Biobased Research

Caloric compensation and eating in the absence of hunger in early childhood: impact of parental feeding practices Sophie Nicklaus, INRA

14.30 - 16.00

Oral Communications

T2

Chair: He Young Paik, Department of Food and Nutrition, Seoul National University, Seoul, Korea Amelia Marti, Universidad de Navarra, Spain

O138 - ANTENATAL MULTIPLE MICRONUTRIENTS COMPARED TO IRON-FOLIC ACID LENGTHENS GESTATION, INCREASES BIRTH SIZE AND REDUCES RISK OF LBW IN RURAL BANGLADESH A A. Shamim, Jivita Project, Gaibandha, Bangladesh

O139 - GLOBAL PROGRESS ON REDUCING ANEMIA IN PREGNANT WOMEN AND YOUNG CHILDREN

R. Galloway, Maternal And Child Health Integrated Program (MCHIP)/Program For Appropriate Technology In Health (PATH), Washington, USA

O140 - INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY

L B. Soerensen, Department of Nutrition, Exercise and Sports, University of Copenhagen, Copenhagen, Denmark

O141 - MOTHER'S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST INDONESIAN URBAN YOUNG CHILDREN A. Roshita, SEAMEO RECFON University of Indonesia, Indonesia

O142 - LONG-CHAIN POLYUNSATURATED FATTY ACIDS IN THE DIET AND MILK OF CROATIAN MOTHERS AT THREE MONTHS POSTPARTUM G. Kresic, Department of Food And Nutrition; Faculty of Tourism and Hospitality Management, University of Rijeka, Opatija, Croatia

O143 - ASSOCIATION BETWEEN DIETARY CALCIUM INTAKE AND BLOOD PRESSURE AMONG PORTUGUESE CHILDREN

S. Abreu, Research Centre in Physical Activity, Health and Leisure, Faculty of Sport, University of Porto, Porto, Portugal

O144 - FREQUENCY AND DETERMINANTS OF DHA SUPPLEMENT USAGE IN PREGNANCY AND LACTATION IN GERMANY

L. Libuda, Research Institute of Child Nutrition Dortmund, University of Bonn, Germany

O145 - MOST EFFECTIVE PERIOD TO CONTROL ANAEMIA IN PREGNANCY: ADOLESCENCE OR PREPREGNANCY? R. Jayatissa, Ministry of Health, Colombo, Sri Lanka

16.00 - 16.30

Special Lecture

T2

Chair: Antonia Trichopoulou, University of Athens Medical School, Hellenic Health Foundation, Athens, Greece

The importance of dietary protein to maintain musculoskeletal mass and quality during aging

Daniel Moore, Department of Human Health and Nutritional Sciences, University of Guelph, Ontario, Canada

Falla Auditorium

08.00 - 10.00

Parallel Symposium

PS4-43

Nutrition profiling (WHO)

T3 - 3.4

Chairs: Chizuru Nishida, WHO/HQ João Breda, WHO/EURO

WHO's work on developing guiding principles and methodological framework for developing or adapting nutrient profile models *Chizuru Nishida, Department of Nutrition for Health and Development, WHO, Geneva*

Nutrient profiling to develop a model for marketing food and nonalcoholic beverages to children: Experiences and lessons learned from Norway

Arnhild Haga Rimestad, Norwegian Directorate of Health and Social Affairs, Norway

Nutrient profiling to develop a model for front of pack labelling: Current issues and considerations

Mary L'Abbe, Earle W. McHenry Professor and Chair, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Canada

Nutrient profiling to develop a mode for regulating health and nutrition claim: Experiences and lessons learned from South Africa Edelweiss Wentzel-Viljoen, Centre of Excellence for Nutrition, Faculty of Health Sciences, North-West University, Potchefstroom, South Africa

Is it possible to develop a global nutrient profile model? Mike Rayner, British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford, UK

11.30 - 13.30

PS4-51

T3 - 3.1

Parallel Symposium

Nutrition, physical activity and the prevalence of NCDs in the Middle **East and North-Africa**

Chairs: Ibrahim Elmadfa, University of Vienna, Austria Nahla Houalla, American University of Beirut, Lebanon

Nutrition as a risk factor of cardiovascular diseases in countries of the Middle East

Nahla Houalla, American University of Beirut, Lebanon

Nutrition and NCDS in North-Africa Najat Mokhtar, International Atomic Energy Agency, Vienna, Austria

Physical activity and lifestyle habits of arab adolescents: Preliminary findings from the arab teens lifestyle study Hazzaa Al Hazzaa, Riyad, Pediatric Exercise Physiology Research Laboratory, Riyadh, Saudi Arabia

Building research capacity in nutrition to prevent NCDs in the Middle-East and North-Africa Ibrahim Elmadfa, University of Vienna, Austria

The Palestinian Micronutrient Survey (PMS)- first representative national nutritional study

Ibrahim Elmadfa, A. Abu-Rub, A. Skaik, N Rizkallah, K. Ben-Abdallah (University of Vienna, MOH Ramallah & Gaza, UNICEF Jerusalem)

14.30 - 16.00

T3

Oral Communications

Chair: Rekia Belahsen, Chouaib Douikkali University, El Jadida, Morocco

> David Martínez, Department of Physical Education, Sports and Human Movement, Faculty of Teacher Training and Education,

Universidad Autónoma de Madrid, Madrid, Spain

O146 - DIETARY PATTERNS ASSOCIATED WITH METABOLIC SYNDROME: THE KHORRAMABAD STUDY

E. Falahi, Department of Nutrition, Faculty of Health and Nutrition, Lorestan University of Medical Sciences, Khorramabad, Iran

O147 - BIOMARKERS OF CARDIOMETABOLIC RISK ARE ASSOCIATED WITH POOR LIFESTYLE PRACTICES IN URBAN SRI LANKAN WOMEN I. Waidyatilaka, Department of Biochemistry And Molecular Biology, Faculty Of Medicine, University of Colombo, Sri Lanka

O148 - THE ECONOMIC IMPACT OF ANAEMIA IN PERU

I. Lasa Hernandez, Country Director, Action Against Hunger Spain,
Lima, Peru

 ${\sf O149}$ - MICRONUTRIENT DEFICIENCY: A PUBLIC HEALTH PROBLEM IN HO CHI MINH CITY, VIETNAM

T T. Minh Hanh, Nutrition Center of Ho Chi Minh City, Vietnam

O150 - THE PARADOXAL LINK BETWEEN FOOD INSECURITY AND OBESITY IN PORTUGUESE ADULTS

M J. Gregório, Faculty of Nutrition And Food Sciences of University of Porto, Porto, Portugal

O151 - STUDY TIME IS ASSOCIATED WITH DIETARY PATTERNS IN EUROPEAN ADOLESCENTS PARTICIPATING IN THE HELENA STUDY A M. Santaliestra-Pasías, GENUD (Growth, Exercise, Nutrition and Development) Research Group, University of Zaragoza, Zaragoza, Spain

O152 - THE ASSOCIATION OF METABOLIC SYNDROME AND FOOD PATTERNS IN NON-MENOPAUSE WOMEN

M. Hajifaraji, Department of Nutrition & Food Security, National Nutrition & Food Technology Research Institute, Faculty of Nutrition & Food Technology, Shahid Beheshti Medical University, Tehran, I. R. Iran

O153 - ASSOCIATION BETWEEN A HEALTHY DIET ACCORDING TO WHO GUIDELINES AND ALL-CAUSE MORTALITY IN EUROPEAN AND AMERICAN ELDERLY, THE CHANCES PROJECT

N. Jankovic, Division of Human Nutrition, Wageningen University, Wageningen, The Netherlands

16.00 - 16.30

Special Lecture

T3

Chair: Theodora Handjeva-Darlenska

Obesity of the rich, obesity of the poor: Two epidemics?

Benjamin Caballero, International Health, Johns Hopkins Bloombergs
School of Public Heatlh Baltimore, USA

Lorca Auditorium

08.00 - 10.00

PS4-44 T4 – 4.5

Parallel Symposium

Nutrition in inflammatory bowel diseases. From basic to clinical application

Chairs: Fermin Sanchez de Medina, Department of Pharmacology, University of Granada, Granada, Spain Herbert Lochs Medizinische Universität, Innsbruck, Austria

To feed or not to feed? Are nutritional supplements worthwhile in active Crohn's disease?

Herber Lochs Medizinische Universität, Innsbruck, Austria

<u>Dietary modulation of peroxisome proliferator-activated receptor gamma</u>

Sibanni Ghosh, University of Calgary, Italy

Artificial Nutrition in IBD: nutritional therapy and beyond? Eduard Cabre, Hospital Tria I Pujol, Badalona, Spain

10.30 – 11.30 Plenary Lecture

Chair: Ibrahim Elmadfa, President of the IUNS, University of Vienna, Vienna, Asutria

Presentation of the IUNS Award

Anna Lartey, University of Ghana, Legon, Ghana

IUNS Award Lecture

Awardee

11.30 - 13.30

PS4-52 T4 – 4.5

Parallel Symposium

International Life Sciences Institute (ILSI) Session on Food Allergy

Chairs: Clare E.N. Mills, Institute of Inflammation and Repair. The University of Manchester, UK
Diána Bánáti, International Life Sciences Institute Europe,
Brussels, Belgium

Introduction to ILSI's Food Allergy programs at the different branches Diána Bánáti, Executive and Scientific Director, International Life Sciences Institute Europe, Brussels, Belgium

Allergens prevalence

Clare E.N. Mills, Institute of Inflammation and Repair. The University of Manchester, UK

Probabilistic risk assessment in setting allergen thresholds Steve Taylor, Food Allergy Research & ResourceProgram -University of Nebraska, USA

The Consumer perspective—Living with uncertainty
Audrey Dunn Galvin, School of Applied Psychology. University College
Cork, Honorary Research Fellow, Department of Paediatrics and Child
Health, Cork University Hospital, Ireland

Protein allergenicity

Gregory S. Ladics, DuPont Company, Pioneer HI-Bred -PhD, DABT, ATS, Research Fellow, DuPont (Co-Chair, HESI Protein Allergenicity Technical Committee)

14.30 - 16.00

Oral Communications

T4

Chairs: Duo Li, Department of Food Science & Nutrition, Zhejiang University, Hangzhou, China Luis Fontana, University of Granada, Granada, Spain

O154 - CHARACTERIZATION OF BIOLOGICAL BARRIERS THAT IMPACT NUTRITIONAL STATUS AMONG HIV-POSTIVE AND HIV-NEGATIVE WOMEN AND THEIR INFANTS IN SEMI-RURAL TANZANIA AL. Wilkinson, Cornell University, Ithaca, New York, USA

O155 - MALNUTRITION AMONG EGYPTIAN CHILDREN
S. El-Masry, Biological Anthropology Dept., National Research Centre,
Cayro, Egypt

O156 - PROCOLLAGEN III N-TERMINAL PROPEPTIDE BEYOND A FIBROSIS BIOMARKER IN NON-ALCOHOLIC FATTY LIVER DISEASE ASSOCIATED WITH OBESITY IN CHILDREN

O. Rangel, Department of Biochemistry and Molecular Biology II,

Institute of Nutrition and Food Technology, Biomedical Research Centre. University of Granada, Granada, Spain

O157 - POST-PRANDIAL APPETITIVE AND GLYCEMIA-REGULATING EFFECTS OF ALMONDS CONSUMED WITH MEALS OR AS SNACKS S Y. Tan, Department of Nutrition Science, Purdue University, West Lafayette, Indiana, USA

O158 - CARDIOVASCULAR PREVENTIVE EFFECT OF FRUITS AND VEGETABLES: IS IT MODIFIED BY OLIVE OIL CONSUMPTION?

J. M. Nunez-Cordoba, Department of Preventive Medicine and Public Health, Medical School - Clinica, Universidad De Navarra, Spain

O159 - THE ROLE OF NUT CONSUMPTION IN MAINTAINING CARDIOVASCULAR HEALTH AND COGNITIVE FUNCTION J. Barbour, Nutritional Physiology Research Centre, University of South Australia, Adelaide, South Australia, Australia

O160 - EFFECTS OF PARENTERAL NUTRITION FORMULAS ON PLASMA LIPID PROFILE IN CHILDREN WITH BONE MARROW TRANSPLANTATION M. Gil-Campos, Reina Sofia University Hospital, Córdoba, Spain

O161 - ABUNDANCE AND DIVERSITY OF MICROBIOTA IN METABOLIC SYNDROME

M. Remely, Department of Nutrional Sciences, University Vienna, Vienna, Austria

16.00 - 16.30

Special Lecture

T4

Chair: Eduard Cabre, Hospital Tria I Pujol, Badalona, Spain

Diet and noncommunicable diseases: Lessons from the EPIC-Study

Heiner Boeing, German Institute of Human Nutrition, Berlin

Room B

08.00 - 10.00

PS4-45

PS4-45 T5 -5.4 Iron and Malaria (FeMal) Project Results

Chairs: Andrew Prentice, London School of Hygiene and Tropical

Medicine

Miguel Arredondo, INTA – University of Chile, Chile

Overview of the Iron and Malaria Project Daniel Raiten, U.S. National Institutes of Health, USA

Harmonization of soluble transferrin receptor (sTfR) measurements Vesper Hubert, U.S. Centers for Disease Control and Prevention

Results from the Biomarkers Reflecting Inflammation and Nutrition Determinants of Anemia (BRINDA) Pooled Dataset Parmi Suchdev , U.S. Centers for Disease Control and Prevention & Sorrel Namaste , U.S. National Institutes of Health

11.30 - 13.30 PS4-53 T5 - 5.4 **Parallel Symposium**

Strengthening micronutrient nutrition surveillance: WHO and CDC tools and methods

Chairs: Juan Pablo Pena-Rosas, World Health Organization, Geneva, Switzerland

Rafael Flores-Ayala, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, USA

The upgrade and expansion of the WHO vitamin and mineral nutrition information system (VMNIS)

Luz Maria De-Regil, Department of Nutrition for Health and Development, World Health Organization (WHO), Geneva, Switzerland Juan Pablo Pena-Rosas, World Health Organization, Geneva, Switzerland

The nutrition survey toolkit and the 2nd edition of the micronutrient survey manual to improve the design and quality of micronutrient surveys

Kevin Sullivan, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, USA

Rafael Flores-Ayala, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, USA

The new WHO/CDC indicator eCatalogue as a source of indicators to monitor and evaluate micronutrient interventions

Juan Pablo Pena-Rosas, World Health Organization, Geneva, Switzerland

Maria Elena del Socorro Jewfferds, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, USA

Continuous household surveys to produce high quality, low cost and timely micronutrient surveillance data.

Rafael Flores-Ayala, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, USA

Maria Elena del Socorro Jewfferds, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, USA

14.30 - 16.00

Oral Communications

T5

Chairs: Mari Nieves García Casal, Instituto Venezolano de Investigaciones Científicas (IVIC), Venezuela Santiago Navas-Carretero, University of Navarra, Pamplona, Spain

O162 - INTELLIGENCE AND ITS ASSOCATION WITH NUTRITIONAL STATUS IN PRIMARY SCHOOL PUPILS IN LAFIA, NIGERIA.

S. Okolo, Department of Paediatrics, Jos University Teaching Hospital, Jos, Nigeria

O163 - INCREASED RESTING ENERGY EXPENDITURE IN YOUNG ADULTS WITH HIGH TRIGLICERYDES

M A. Anaya-Loyola, Universidad Autónoma De Querétaro, Mexico

O164 - SERUM RETINOL AND ANTHROPOMETRIC STATUS OF 2-5-YEAR-OLD SOUTH AFRICAN CHILDREN AND THEIR CAREGIVERS WITH DIVERSE DIETARY PATTERNS

M. Faber, Nutritional Intervention Research Unit, Medical Research Council, South Africa

O165 - DESIGN, ASSESSMENT OF REPRODUCIBILITY AND VALIDITY OF A FOOD FREQUENCY QUESTIONNAIRE IN A SAMPLE OF ADULTS LIVING IN QUITO-ECUADOR(QFA-QUITO)

M. Silva, Department of Public Health Nutrition, Ministry of Health, Quito-Ecuador

O166 - RELATIONSHIP BETWEEN MAGNESIUM INTAKE, C- REACTIVE PROTEIN LEVELS AND THE METABOLIC SYNDROME COMPONENTS IN A HEALTHY ADULT POPULATION FROM MADRID

T K. Villalobos, Department of Nutrition, Faculty of Pharmacy Universidad Complutense de Madrid, Madrid, Madrid, Spain

O167 - DETERMINANTS OF VITAMIN D STATUS IN PATIENTS WITH STABLE ANGINA

J. Dierkes, University of Bergen, Dept. Of Clinical Medicine, Norway

O168 - RISK FACTORS OF IRON DEFICIENCY AMONG CHILDREN 6-59 MONTHS IN THE NORTHERN REGION OF GHANA.

B. Abu, Department of Nutrition and Dietetics, University of the Free State, Bloemfontein, Free State, South Africa

O169 - TOWARDS A COMPREHENSIVE WEB-BASED DIETARY RESEARCH INFRASTRUCTURE TO SUPPORT INTERNATIONAL MONITORING AND EPIDEMIOLOGICAL NUTRITIONAL STUDIES

N. Slimani, International Agency For Research On Cancer, Dietary Exposure Assessment Group, Lyon, France

16.00 - 16.30

Special Lecture

T5

Chair: Malzorgata Schlegel-Zawadzka, Institute of Public Health, Jagiellonian University, KRAKOW, Poland

Iron food fortification and anemia prevention

Mari Nieves García Casal, Instituto Venezolano de Investigaciones Científicas (IVIC), Venezuela

Room C

08.00 - 10.00

Parallel Symposium

PS4-46 T6 -6.1 Functional roles of human milk and other selected oligosaccharides

Chairs: Alan W. Walker, Harvard Medical School, Massachusetts General Hospital, USA Jamuna Prakash, Department of Food Science and Nutrition, University of Mysore, Manasagangotri, Mysore

Isolation, characterization and functional roles of human milk

oligosaccharides Clemens Kunz, Institute of Nutritional Sciences, University of Giesse, Germany

Basic aspects of human milk oligosaccharides; new animal and ex-vivo observations

Pedro A.Prieto, Abbott Nutrition, Strategic Research Department, Columbus, USA

The role of human milk oligosaccharides in intestinal colonization Alan W. Walker, Harvard Medical School, Massachusetts General Hospital, USA

Non-absorbable oligosaccharides: just prebiotics?

Olga Martínez, CIBERehd. University of Granada, Granada, Spain

11.30 - 13.30

Parallel Symposium

PS4-54 T6 – 6.1 **Functional roles of prebiotic inulin-type fructans**

Chairs: Nathalie Delzenne, Université Catholique de Louvain, Belgium

Olga Martínez, CIBERehd. University Of Granada, Granada, Spain

Prebiotic modulation of the human gut microbiota: Is this a health benefit?

Robert A. Rastall, Reading University, UK

Gut microbiota impact on metabolic disorders associated with obesity Nathalie Delzenne, Université Catholique de Louvain, Belgium

Prebiotics in infant nutrition Ricardo Closa Monasterolo, Hospital Universitari Joan XXIII de Tarragona, Spain

Role of prebiotics in regulating energy intake and body weight Raylene Reimer, Univ Calgary, Canada

14.30 - 16.00

Oral Communications

T6

Chairs: Malgorzata Schlegel-Zawadzka, Department of Human Nutrition, Institute of Public Health, Faculty of Health Sciences, Jagiellonian University Medical College, Krakow, Poland Jorge Mujico, Jorge Mujico, Spanish National Research Council (CSIC), Madrid, Spain

O170 - COLD PRESSED OILS AS A SOURCE OF BIOACTIVE COMPOUNDS A. Obiedzinska, Institute of Agricultural and Food Economics - National Research Institute, Warsaw, Poland

O171 - INHIBITORY EFFECTS OF LYCOPENE ON THE PROLIFERATION AND PROGRESSION OF HUMAN COLON CANCER CELLS IN BOTH IN VITRO AND IN VIVO MODELS

F. Tang, Department of Nutrition, China Medical University, China

O172 - ANTI-INFLAMMATORY AND ANTIOXIDANT PROPERTIES OF FLAVONOID-RICH EXTRACTS FROM HELICHRYSUM AND GRAPEFRUIT IN INSULIN RESISTANT RATS

A L. De La Garza, Department of Nutrition, Food Science and Physiology, University of Navarra, Spain

O173 - ORAL INTAKE OF A SPECIFIC OREGANO EXTRACT BY HEALTHY HUMANS INCREASES CALMNESS, VIGILANCE AND MENTAL PROCESSING SPEED

M H. Mohajeri, DSM Nutritional Products, Human Nutrition, Basel, Switzerland

O174 - IMPROVEMENT EFFECTS OF CHLOROGENIC ACID ON LATE DIABETES THROUGH ADIPONECTIN RECEPTOR SIGNALING PATHWAYS IN DB/DB MICE

C. Chang, 3rd Hospital of Peking University, China

O175 - YOUNG ZEA MAYS POWDER IMPROVES SOME NUTRIENT COMPOSITION AND REDUCES GLYCEMIC INDEX OF BUTTER BISCUIT W R. W I, Universiti Sains Malaysia, Malaysia

O176 - GLYCEMIC AND INSULINEMIC RESPONSES DIFFER DEPENDING ON THE CONTENT OF SLOWLY DIGESTIBLE STARCH IN CEREAL PRODUCTS INCLUDED IN BREAKFAST

A. Meynier, Mondelez International R&D, Nutrition Department, Saclay, France

O177 - COMPARISON OF THE EFFECT OF DARK AND WHITE CHOCOLATE ON APO B, APOA-1, LIPID PROFILE, HS-CRP, GLYCAEMIC CONTROL AND BLOOD PRESSURE IN HYPERTENSIVE TYPE 2 DIABETICS S. Eghtesadi, Department of Nutrition and Biochemistry, Tehran University of Medical Sciences, Tehran, Iran

16.00 - 16.30

Special Lecture

T6

Chair: Frank Hu, Harvard Medical School and Channing Lab, BWH, USA

Cardiovascular Effects of Dietary Flavonoids - Is there a potential benefit in diabetes?

Ian MacDonald, University of Nottingham, UK

Machuca and Albéniz Rooms

08.00 - 10.00

Parallel Symposium

PS4-47

Mediterranean diet and disease

T7 - 7.1

Chairs: Denis Lairon, Vice President of FENS Joan Sabaté, Loma Linda University, California, USA

Mediterranean diet and metabolic syndrome Demosthenes Panagiotakos, Dept of Nutrition and Dietetics, Harokopio University, Athens, Greece

Mediteranean diet, health benefits and the role of traditional foods Antonia Trichopoulou, University of Athens Medical School, Hellenic Health Foundation, Athens, Greece

Mediterranean diet and cancer: Where we are and new insights Elio Riboli, School of Public Health at Imperial College London, UK

Depression and mediterranean diet Lluis Serra-Majem, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, Spain

11.30 - 13.30 PS4-55 T7 - 7.1 **Parallel Symposium**

PREDIMED study

Chairs: Frank Hu, Harvard Medical School and Channing Lab, BWH, USA

> Carlos Alberto González, Catalan Institute of Oncology, Hospitalet de Llobregat, Barcelona, Spain

The PREDIMED study: Rational, design, methods and interventions. *Emilio Ros Rahola, Hospital Clinic, Barcelona, Spain*

Effect of Mediterranean diet on classical and emergent risk factors of cardiovascular disease in the PREDIMED Study

Montserrat Fitó, Cardiovascular Risk and Nutrition Research Group,

IMIM-Institut de Recerca del Hospital del Mar, Barcelona, Spain

Mediterranean diet, metabolic syndrome and diabetes prevention in the PREDIMED Study

Jordi Salas-Salvadó, Rovira i Virgili University, CIBERobn, Spain

Mediterranean diet in the primary prevention of cardiovascular disease

Ramon Estruch, Department of Internal Medicine, Hospital Clinic, Institut d'Investigacions Biomèdiques August Pi Sunyer (IDIBAPS), Barcelona, Spain

Interactions between Mediterranean diet and genetic variants, and risk of disease in the PREDIMED Study

Dolores Corell, Department of Preventive Medicine and Public Health, University of Valencia, Valencia, Spain

The PREDIMED II trial: Objectives and implementation.

Miguel Angel Martinez-Gonzalez, Department of Preventive Medicine and Public Health, Medical School-Clinica, University of Navarra, Pamplona, Spain

14.30 - 16.00

Oral Communications

T7

Chairs: Maria del Puy Portillo, Department of Nutrition and Food Sciences, Universidad del País Vasco, Vitoria, Spain Elvira Larque, University of Murcia, Spain

O178 - ADOLESCENT DIETARY PATTERNS: TRADITION OR CONVENIENCE

M. De Lanerolle-Dias, Department of Biochemistry And Molecular Biology, Faculty Of Medicine, University of Colombo, Colombo, SriLanka

O179 - IMPROVING WOMEN AND CHILDREN NUTRITION THROUGH TARGETED CAPACITY BUILDING INTERVENTIONS: EXPERIENCE FROM ETHIOPIA

A. Guyon, John Snow Inc.(JSI), Ethiopia

O180 - CONDITIONS OF NUTRITION OF CHILDREN FROM 7 TO 10 YEARS IN PUBLIC SCHOOLS AT REGION MARUÍPE, VITORIA/ES - BRAZIL.

L. Salaroli, Department of Education Integrated Health, Federal
University of Espírito Santo, Brazil

O181 - TRENDS IN FOOD CONSUMPTION OVER 25 YEARS IN A DUTCH ADULT POPULATION.

M. Geurts, Centre for Nutrition, Prevention and Health services, National Institute of Public Health and the Environment, The Netherlands

O182 - SOCIO-DEMOGRAPHIC PATTERNS OF HYPERTENSION, KNOWLEDGE, BEHAVIOURS AND PRACTICES OF ADULT TRIBAL (ADIVASIS) POPULATION IN INDIA: A FIRST NATIONAL MONITORING SURVEY

A. Laxmaiah, Division of Community Studies, National Institute of Nutrition, Hyderabad, India

O183 - THE EFFECT OF AFRICAN LEAFY VEGETABLES ON THE MICRONUTRIENT STATUS OF SCHOOL CHILDREN IN SOUTH AFRICA: A RANDOMIZED CONTROLLED TRIAL

J. Osei, Centre of Excellence For Nutrition (CEN), North-West University, South Africa

O184 - DEVELOPING HEALTHY INDIGENOUS MENUS THROUGH WOMEN'S GROUP PARTICIPATION

S. Poosawang, Faculty of Humanities, Chiang Mai University, Chiang Mai, Thailand

O185 - PURCHASES OF ULTRA-PROCESSED PRODUCTS BY COLOMBIAN HOUSEHOLDS AND THEIR ASSOCIATION WITH DIETARY QUALITY C. Arango, National School of Public Health, University of Antioquia, Medellín, Antioquia, Colombia

16.00 - 16.30

Special Lecture

T7

Chair: Maria Daniel Vaz de Almeida, Sciences, University of Porto, Porto, Portugal

Innovation and quick-wins in nutrition policies in WHO European Region

Joao Breda, WHO Programme Manager Nutrition, Physical Activity and Obesity

Room D

08.00 - 10.00

Parallel Symposium

PS4-48 T8 – 8.2 **Food and Nutrition Reporting in the Media**

Chair: Josephine Wills, Director General, European Food Information Council, Brussels, Belgium

Do Media Headlines Equal Credibility and Trust? A Look at US Consumer Insights on Trusted Sources for Food & Health Information Marianne Smith Edge, International Food Information Council, Washington, USA

Comparison of reporting of food benefits and risks in European newspapers

Mary Friel, European Food Information Council (EUFIC), Brussels, Belgium

The Challenges of reporting about nutrition; a journalist's perspective Emilio de Benito Cañizares, EL PAÍS Science/ Health Journalist, Madrid, Spain

11.30 - 13.30

Parallel Symposium

PS4-56A T8 – 8.2 Bellagio report on healthy agriculture, healthy nutrition, healthy people

Chair: Ascensión Marcos, Spanish National Research Council (CSIC), Madrid, Spain

Marine n-3 pufa intake and risk of breast cancer Duo Li, Department of Food Science & Nutrition, Zhejiang University, Hangzhou, China

Consumption patterns and trends for sugar-added beverages in Malaysia: Implications for human health Leng Huat Foo, Programme of Nutrition, School of Health Sciences, Universiti Sains Malaysia, Health Campus, Kelantan, Malaysia

Sugar-sweetened beverages consumption and obesity
Guansheng Ma, National Institute for Nutrition and Food Safety, China
Chinese Center for Disease Control and Prevention, Beijing, China

08.00 - 10.00

Parallel Symposium

PS4-48B

Towards a European school food and nutrition network

Chair: Barrie Margetts, University of Southampton, UK

Introduction to the session
Barrie Margetts, University of Southampton, UK

Follow-up on municipality interventions to prevent obesity - A newly developed cartoon series on education in schools

Ana Rito, National Institute of Health, Doutor Ricardo Jorge,

Universidade AtLantica, Lisbon, Portugal

Mechanisms to inform policy developments on school nutrition: examples from COSI (Childhood Obesity Surveillance Initiative) and the Health Behaviour in School-Aged Children (HBSC)

Joao Breda, WHO Europe, Programme Manager, Nutrition, Physical Activity and Obesity Programme, Copenhagen, Denmark

Vivian Barnekow, WHO Europe, Programme Manager, Child and Adolescent Health and Development, Copenhagen, Denmark

School food, attainment and obesity

Michael Nelson, Director, Public Health Nutrition Research Ltd, London,

UK

Assessing school food policies across the EU Sandra Caldeira, European Commission, Institute for Health and Consumer Protection, Ispra, Italy

Introduction to a proposal for a European school food and nutrition network

Michael Nelson, Director, Public Health Nutrition Research Ltd, London,UK

Joao Breda, WHO Europe, Programme Manager, Nutrition, Physical Activity and Obesity Programme, Copenhagen, Denmark Sandra Caldeira, European Commission, Institute for Health and Consumer Protection, Ispra, Italy

Needs of network members – General Discussion

Ways forward

Michael Nelson, Director, Public Health Nutrition Research Ltd, London,UK

Joao Breda, WHO Europe, Programme Manager, Nutrition, Physical Activity and Obesity Programme, Copenhagen, Denmark Sandra Caldeira, European Commission, Institute for Health and Consumer Protection, Ispra, Italy

Summing up
Barrie Margetts, University of Southampton, UK

11.30 - 13.30

PS4-56B

Parallel Symposium

Mitigating affordability constraints to accessing nutrient requirements

Chairs: Saskia de Pee, Technical Advisor Nutrition and HIV/AIDS, WFP, Rome, Italy

> Nancy J Aburto, UN World Food Programme, WFP – CIFF Stunting Prevention Initiative, Rome, Italy

Introduction of the topic

Saskia de Pee, Technical Advisor Nutrition and HIV/AIDS, WFP, Rome, Italy

Use of Propan to design complementary feeding guidelines in-line with local food preferences and affordability - focus on Latin America *Chessa Lutter*

Improving complementary feeding practices within the limits of households' constraints of accessing nutritious foods - example from Zimbabwe

Amy Desai, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

Modeling different strategies to increase affordability of meeting nutrition requirements of different household members – Cost of Diet example from Indonesia

Giulia Baldi, Programme Officer Nutrition, World Food Programme, Indonesia Country Office, Jakarta, Indonesia

Comparing results of Cost of Diet analysis obtained with primary and secondary data – example from Afghanistan

Soo Mee Baumann, Programme Officer Vulnerability Assessment and Mapping (VAM), WFP Regional Bureau for Asia, Bangkok, Thailand

14.30 - 16.00

Oral Communications

T8

Chairs: Xiaguang Yang, China Antonio Guadix, Department of Engineering, University of Granada

O186 - THE INFORMAS FRAMEWORK FOR MONITORING AND BENCHMARKING DIET QUALITY GLOBALLY: A STEP-BASED APPROACH S. Vandevijvere, School of Population Health, Department of Epidemiology and Biostatistics, University of Auckland, New Zealand

O187 - MONITORING THE NUTRITIONAL COMPOSITION OF FOODS TO IMPROVE THE GLOBAL FOOD SUPPLY

E. Dunford, The George Institute For Global Health, Sydney, Australia

O188 - HIGH BIOAVAILABLILTY IRON MAIZE (ZEA MAYS L.) DEVELOPED THROUGH MOLECULAR BREEDING PROVIDES MORE ABSORBABLE IRON IN-VITRO (CACO-2) AND IN-VIVO (GALLUS-GALLUS)

E. Tako, USDA-ARS, Robert Holley Center for Agriculture and Health, Cornell University, NY, USA

0189 - ASSOCIATION BETWEEN DIETARY INTAKES OF POLYCHLORINATED BIPHENYLS (PCBS) AND RISK OF OBESITY Dept. Of Preventive Medicine And Public M. Bes-Rastrollo, Health, University of Navarra, Pamplona, Spain; CIBER Fisiopatología de La Obesidad Y Nutrición (CIBERobn), Instituto de Salud Carlos III, Spain

O190 - COMPARISON OF EFFECT OF CASH TRANSFER WITH OR WITHOUT SPECIAL NUTRITIOUS FOOD ON PREVENTING CHILDHOOD **ACUTE MALNUTRITION IN NIGER** C. Langendorf, Epicentre, Paris, France

O191 - POTENTIAL OF WILD EDIBLE PLANTS TO COMBAT NUTRITIONAL AND FOOD INSECURITY: A CASE FROM INDIAN HIMALAYAN REGION I. Bhatt, G.B. Pant Institute of Himalayan Environment and Development, India

0192 - EFFECTIVE COMMUNICATION CHANNELS FOR COMMUNITY MOBILIZATION DURING VITAMIN A SUPPLEMENTATION CAMPAIGNS IN 3 STATES OF NIGERIA

I. Chima, Helen Keller International, Abuja, Nigeria

0193 - PHYTOCHEMICAL COMPOSITION OF PROCESSED AND RAW SAMPLES OF SOME LESSER KNOWN VEGETABLES FROM EASTERN ZONE NIGERIA.

O. Olawale, Federal University Wukari, Nigeria

16.00 - 16.30 **Special Lecture**

Chair: Philip C. Calder, University of Southampton (USoton), UK

Identifying and characterizing the effects of nutrition on learning and memory

Neal Cohen, Neuroscience Program, and Beckman Institute; Neuroscience Program (NSP); Center for Nutrition, Learning, and Memory (CNLM); Center for Lifelong Improvement of Minds & Brains (CLIMB); University of Illinois at Urbana-Champaign

Friday, September 20th

Andalucía Rooms

08.00 - 10.00

Parallel Symposium

PS5-57 T1 -1.4 **Early programming and nutrition in Latin America**

Chairs: Francisco Mardones, Pontificia Universidad Católica de Chile, Chile Cristina Campoy, University of Granada, Spain

Maternal calcium intake and modeling of fetal blood pressure

JM Belizan, Institute for Clinical Effectiveness, Buenos Aires, Argentina

Body mass index at birth, school age and adulthood as predictor of impaired blood pressure in young adults in Latin America Alexandre A. Ferraro, Universidade de Sao Paulo, Brazil

Maternal obesity and neonatal insulin resistance in the origin of metabolic syndrome in childhood Marcelo Farías, Pontificia Universidad Católica de Chile, Chile

Follow up of a cohort of malnourished children at age 20-30 years Jaime Rozowski, Pontificia Universidad Católica de Chile, Chile

Early growth and bone maturation Sylvia Cruchet, Institute of Nutrition and Food Technology, University of Chile, Chile

A new standard for insulin resistance and its association with the metabolic syndrome in Chilean school age children Salesa Barja, Pontificia Universidad Católica de Chile, Chile

Association of pre and post natal growth with metabolic syndrome components during childhood Francisco Mardones, Pontificia Universidad Católica de Chile, Chile

10.30 - 12.00

Parallel Symposium

PS5-65 T1 -1.4 Metabolic and nutritional aspects of genetic diseases

Chairs: José L. Santos, Pontificia Universidad Católica de Chile, Santiago, Chile Luis Fontana, University of Granada, Spain

Therapeutic strategies in organic acidurias Magdalena Ugarte, Universidad Autónoma de Madrid, Spain

Nutritional aspects of Phenylketonuria &Methylmalonic acidemia Verónica Cornejo, Institute of Nutrition and Food Technology (INTA) - University of Chile, Santiago, Chile

Omega 3 fatty acids and inborn errors of metabolism

Mercedes Gil-Campos, Reina Sofía University Hospital, Córdoba, Spain

Strategies for searching genetic causes of extreme phenotypes of metabolic traits

José Luis Santos, Pontificia Universidad Católica de Chile, Santiago, Chile

Machado and Picasso Rooms

08.00 - 10.00

PS5-58 T2 - 2.1 The NU-AGE project: New dietary strategies about healthy nutrition for the elderly

Chairs: Claudio Franceschi, University of Bologna, Italy Sue Fairweather-Tait, University of East Anglia, UK

A randomized trial on the effect of a full dietary intervention on ageing in European elderly people: The NU-AGE study Lisette de Groot, University of Wageningen, The Netherlands

Diet-microbiota-health interactions in older persons - the ELDERMET study and probing causality in the NuAge project Paul O'Toole, University of Cork, Ireland

Nutritional metabonomics: development and validation of aging biomarkers Sebastiano Collino, estec, Switzerland

Socio-economic determinants of food choices and diet quality among the EU elderly

Xavier Irz, Maa Ja ElintarviketaloudenTutkimuskeskus-Finland

(Machado) 10:30-12:00

Parallel Symposium

PS5-66A T5 – 5.4 Trace elements and chronic diseases

Chairs: Manuel Ruz, University of Chile, Chile
Miguel Navarro, Department of Nutrition and Food Sciences,
University of Granada, Spain

Zinc and obesity Jorge Rosado, Universidad Autonoma de Queretaro, Queretaro, Mexico

Iron and inflammation in type-2 diabetes *Miguel Arredondo, University of Chile, Chile*

Zinc and inflammation in type-2 diabetes Olga P. García, Universidad Autónoma de Querétaro, Querétaro, Mexico

Zinc as coadjuvant in type-2 diabetes treatment *Manuel Ruz, University of Chile, Chile*

Falla Auditorium 8:00-10:00

PS5-59 T3 – 3.6

Parallel Symposium

Food insecurity and obesity across the life cycle

Chairs: Rafael Pérez-Escamilla, Yale School of Public Health, USA Gilberto Kac, Federal University of Rio de Janeiro, Brazil

Household food insecurity and obesity across the life cycle: Conceptual framework and biological plausibility

Rafael Pérez-Escamilla, Yale School of Public Health, USA

Household foof insecurity and excessive weight among Brazilian subjects: A life-course approach *Gilberto Kac, Federal University of Rio de Janeiro*

Food security and obesity risk throughout life cycle stages in Mexico *Juan Rivera/Teresa Shamah Levy, INSP, Cuernavaca, Mexico*

Household food insecurity and obesity risk across the life course: USA *Ed Frongillo, University of South Carolina, Columbia, USA*

Summary and policy implications Gilberto Kac, Federal University of Rio de Janeiro, Brazil Rafael Pérez-Escamilla, Yale School of Public Health, USA

10.30 - 12.00

PS5-67 T3 - 3.2

Parallel Symposium

Type 2 diabetes in Asia's rapid growth is due to genetic or dietary change?

Chair: Duo Li, Department of Food Science & Nutrition, Zhejiang University, Hangzhou, China

Effects of nutrition, lifestyle and genetic factors on metabolic abnormalities among chinese

Xu Lin, Professor, Chinese Academy of Sciences (CAS), China

Asians are much more vulnerable to dietary change due to lower insulin secretion.

Kiyoshi Tanaka, Kyoto Women's University, Kyoto, Japan

Overweight and diabetes in India

Anura V Kurpad, St John's Medical College, Bangalore, India

Effect of vitamin b12 and n-3 polyunsaturated fatty acids on plasma homocysteine, and other cardiovascular risk factors: randomized controlled trial

Tao Huang, Johns Hopkins University, Baltimore, Maryland, USA

Insulin resistance in glucose tolerant obese adolescents are associated with increased level of plasma hscrp and uric acid Agussalim Bukhari, Hasanuddin University, Makassar, Indonesia

Lorca Auditorium

08.00 - 10.00

LO.00 Parallel Symposium

PS5-60 T4 -4.5 Maternal nutritional supplementation of HIV-infected women during lactation: Implications for maternal and infant health in resource-poor settings

Chairs: Linda Adair, University of North Carolina at Chapel Hill, USA Mònica Bulló Bonet, Rovira i Virgili University, CIBERobn, Spain

The BAN Study in Malawi: Use of qualitative methods to guide study design and evaluation of a randomized controlled nutrition supplementation and prevention of mother-to-child nutrition intervention trial

Margaret Bentley, University of North Carolina at Chapel Hill, USA

Effects of maternal nutrition supplementation and anti-retroviral treatment on the postpartum weight and micronutrient status and breast milk composition of HIV-infected women in the BAN Study Linda Adair, University of North Carolina at Chapel Hill, USA

Growth and micronutrient status of HIV-exposed infants in the BAN study during the first year of life

Valerie Flax, University of North Carolina at Chapel Hill, USA

Meeting the nutritional needs of hiv-infected women and infants in resource-poor settings: program and policy implications

Ellen Piwoz, Bill and Melinda Gates Foundation, Washington, USA

10.30 - 12.00

Parallel Symposium

PS5-68 T4 – 4.5 New insights in obesity, metabolic syndrome and diabetes

Chairs: Francisco Mardones, Pontificia Universidad Católica de Chile, Chile

Jose Alfredo Martinez, University of Navarra, Pamplona, Spain

Genetic susceptibility to obesity and metabolic syndrome in childhood *Concepcion M. Aguilera, University of Granada, Granada, Spain*

Circadian rhythms, food timing and obesity *Marta Garaulet, University of Murcia, Spain*

Recent advances in nutritional sciences: gene therapy for diabesity and the genetic basis of postprandial metabolism

Raul A. Bastarrachea, Department of Genetics, Texas Biomedical

Research Institute, San Antonio, Texas, USA

12.00 - 13.30

Closing Ceremony

Chairs: Angel Gil and Ibrahim Elmadfa

12:00-12:15

Towards a new milestone in European nutrition and physical activity policies - Vienna Declaration on Nutrition and NCD

João Breda, WHO Regional Office for Europe João Breda, Nutrition, Physical Activity and Obesity Programme Division of Noncommunicable Diseases and Life-Course World Health Organization, Copenhagen, Denmark

12:15-12:45 Closing Lecture

Health and Well Being in the Changing Urban Environment

Dov Jaron, School of Biomedical Engineering, Science & Health Systems, Member of the International Council of Science (ICSU) Board

12.45-13.00	Presentation IUNS 21st ICN
13.00-13.15	Closing remarks
13.15-13.45	Performance
14.00-15.30	Show Cooking at Parque de las Ciencias

Room B

08.00 – 10.00	Parallel Symposium
PS5-61	Micronutrient Fortification. Science and Strategies for Public Health
T5 -5.4	Improvement in Asia

Chairs: Takashi Togami, Director, ILSI CHP Japan Geoffrey Smith, President, ILSI Southeast Asia Region

Welcome Remarks

Takashi Togami, Director, ILSI CHP Japan

Micronutrients and Food Fortification – Strategic and Practical Issues Geoffry L Smith, President, ILSI Southeast Region

GAIN's Global Strategy on Food Fortification to Improve Public Health – Asia Highlights

Regina Moench-Pfanner, Global Alliance for Improved Nutrition, Singapore

Iron-fortified Soy Sauce in China- An Assessment of 10 years of Policy and Business Development Junshi Chen, ILSI Focal Point China, China

Vietnam: Iron-fortified Fish Sauce-Evaluating and Adopting a Successful Model

Le Thi Hop, National Institute of Nutrition, Vietnam

Cambodia: Iron-fortified Fish Sauce- Progress & Development Theary Chan, Reproductive and Child Health Alliance (RACHA), Cambodia

Philippines: Iron Fortified Rice - Lessons learnt, Opportunities and Challenges

Mario Capanzana, Food and Nutrition Research Institute, Philippines

10.30 - 12.00 PS5-69 T5 - 5.4 **Parallel Symposium**

Evaluation of food fortification and biofortification interventions in developing countries using stable isotopes

Chairs: Najat Mokhtar, International Atomic Energy Agency Warren T. K. LEE, Economic & Social Development Department, FAO

Efficacy of Vitamin A in fortified extruded rice in school children in North-Eastern Thailand

Emorn Wasantwisut, Institute of Nutrition, Mahidol University,

Bangkok, Thailand

Vitamin A intake in exclusively breastfed babies from mothers consuming daily vitamin a fortified oil during six months

Asmaa eEl Hamdouchi, CNESTEN-Université IbnTofail, Rabat, Morocco

Use of the deuterated retinol dilution technique to assess total body vitamin A stores in Mexican preschoolers consuming vitamin A-fortified milk

Humberto Astiazarán García, Centro de Investigación en Alimentación y Desarrollo (CIAD), Mexico

A Multiple Meal Study to Evaluate Human Iron Absorption from Typical Rwandan Meals Based on Beans Jean Bosco Gahutu, University of Rwanda, Rwanda

Vitamin A status assessment: setting the scene Sherry Tanumihardjo, Department of Nutritional Sciences, University of Wisconsin, WI. USA

Room C

08.00 - 10.00

Parallel Symposium

PS5-62 T6 - 6.1 Functional properties of proteins of biological and food origin

Chairs: Miquel Moretó, University de Barcelona, Barcelona, Spain Olga Martínez Augustin, University of Granada, Spain

Food derived peptides with potential health benefits RJ Fitzgerald, University of Limerick, Ireland

Effects of animal plasma supplements

Miquel Moretó, University of Barcelona, Spain

Anti-inflammatory mechanisms of bioactive milk proteins in the intestine of newborns

Dereck E.W. Chatterton. University of Copenhagen, Denmark

10.30 - 12.00

Parallel Symposium

PS5-70 T6 – 6.1 Phytochemicals responsible for the food function, from the chemistry to physiological relevance and human health

Chairs: Taiichiro Seki, Nihon University, Japan Hitomi Kumagai, Nihon University, Japan

Red wine polyphenoles and human health Cristina Andres-Lacueva, University of Barcelona, Spain

Multi-function of gallate for human health Sue-Joan Chang, College of Bioscience and Biotechnology, National Cheng Kung University, Taiwan

Garlic-derived compounds for the prevention of lifestyle-related diseases

Taiichiro Seki, College of Bioresource Sciences, Nihon University, Japan

Physiological functions of a flavor component from shiitake mushrooms

Hitomi Kumagai, College of Bioresource Sciences, Nihon University, Japan

Machuca and Albéniz Rooms

(Machuca) 08.00 - 10.00

Parallel Symposium

PS5-63A T7 - 7.4 Regulation versus innovation (IUFoST)

Chairs: Ping Fan Rao, President IUFFoST

V. Prakash Council Member of IUFFoST and IUNS and

Distinguished Scientist of CSIR-India

Regulation and Innovation in functional foods

Delia B. Rodriguez-Amaya, International Academy of Food Science and Technology, Campinas, Brasil

Food Regulation and Processing Innovation in Vietnam

Ly Nguyen Binh, Department of Food Technology, College of Agriculture
and Applied Biology, Can Tho University, Vietnam

Advancing novel preservation technologies demands harmonizing international food safety legislation and regulations

Larry Keener, International Product Safety Consultants, Inc. (IPSC), Seattle, Washington, USA

How to work with the food industry to improve the nutritional profiles of processed foods

Nigel Sunley, Sunley Consulting, Johannesburg, South Africa

(Albéniz) 08.00 - 10.00 PS5-63B

Food systems for nutrition and health: growing, shopping, cooking and eating

Sustainable and affordable horticulture for healthy communities: African and Asian experiences

Ray-Yu Yang*, Peter Hanson, J.d'A. Hughes, J.D.H. Keatinge AVRDC – The World Vegetable Center, 60 Yi-Min Liao, Shanhua, Tainan, Taiwan

Introduction to foodscape studies – what they can do for public health nutrition

Bent Egberg Mikkelsen, Aalborg University, Denmark

Could the Greek Home Garden explain the reduced cardiovascular mortality in elderly greek migrants to Australia?

Catherine Itsiopoulos*, Antigone Kouris, Tania Thodis, Speros Tsindos, Elleni Kaias, La Trobe University, Melbourne, Australia

Beyond foodscapes –the importance of health geography and the built environment

Agneta Yngve, Örebro University, Sweden

The role of shopping and cooking in the food and health systems of elders

Meei-Shyuan Lee*, Mark L Wahlqvist, Yu-Hung Chang, Rosalind CY Che, National Defense Medical Center, Taiwan

Integrating Food and Health with Ecosystems for Human Development Mark L Wahlqvist , Monash University, Melbourne, Australia

(Machuca) 10.30 – 12.00

Parallel Symposium

PS5-71A T7 - 7.4

The value of nutrition labelling: Has nutrition labelling reduced any chronic diseases? (IUFoST)

Using South African food companies' nutrition strategies and consumer knowledge, attitudes and practices pertaining to nutrition information to develop guidelines for the promotion of the prevention of chronic diseases of lifestyle

Jane Badham, JB Consultancy, South Africa

The Nutrition Facts Table – has Front of Pack Labelling left the back of pack behind?

Mary L'Abbe, University of Toronto, Canada

Nutrition Labelling in Europe - Effective Guidance Towards More Healthful Food Choices?

Laura Fernández Celemin, European Food Information Council (EUFIC), Brussels, Belgium.

(Albéniz) 10.30 – 12.00

Parallel Symposium

PS5-71B

IUNS Task Force

T7 - 7.4

Urbanization, Climate Change and Nutrition Insecurity

Chairs: Godwin D. Ndossi, Tanzania National Health Research Forum, Tanzania

Osman Galal, University of California, USA

Nutrition and food security: a climatological perspective Tom Beer, International Union of Geodesy and Geophysics (IUGG)

Effects of climate change on the food supply chain and their impact on urban nutrition security.

Albert E. J. McGill, International Union of Food Science and Technology (IUFoST)

Influence of urbanization on climate change and nutrition insecurity *Tola Atinmo*, Dept of Human Nutrition, University of Ibadan, Nigeria

Urbanization and food security: income and non-income dimensions Cecilia Tacoli, International Institute for Environment and Development, UK

Ecosystem approaches to nutrition and health security: urbanised communities

Mark L Wahlqvist, Monash University, Melbourne, Australia & National Health Research Institutes, Taiwan

Room D 08.00 – 10.00

PS5-64 T8 -8.2

Parallel Symposium

Improving food at work: an international approach and some national experiences

Chairs: Eduardo Atalah Samur, Faculty of Medicine, University of Chile, Santiago de Chile, Chile

Fernando Gil, Catedrático de Toxicología, Granada, Spain

Challenges to improve nutrition at workplace in Chile. Eduardo Atalah, Faculty of Medicine, University of Chile, Santiago de Chile, Chile

Feeding program at work (PAT) in Brazil Antonio Neto, President of the Union of Workers of Computing and Information Technology, Sao Paulo, Brazil

Challenges to improve nutrition at workplace in Spain.

Jordi Suriñach, Research Institute of Applied Economics (IREA),

Barcelona, Spain

Good practice of nutrition program at workplace: Spain experience Monica Garcia, Director of Human Resources, Orange Society

10.30 - 12.00

Parallel Symposium

PS5-72 T8 -8.2 The shift toward a modern industrialized food system, potential implications for nutrition-related chronic diseases and for public policies

Chairs: Antonio Guadix, Department of Engineering, University of

Granada, Granada, Spain Carlos Monteiro

Evolution from traditional food systems to the globalizing food system: a possible mismatch between human diet and health?

Jean-Claude Moubarac, University of Sao Paulo, Brazil

The new role of industrial food processing in food systems: impact on nutrition and health – a perspective from the South Carlos Monteiro, University of Sao Paulo, Brazil

The modern global food system—its evolution and current status and how it is related to our health Barry Popkin, University of North Carolina, USA